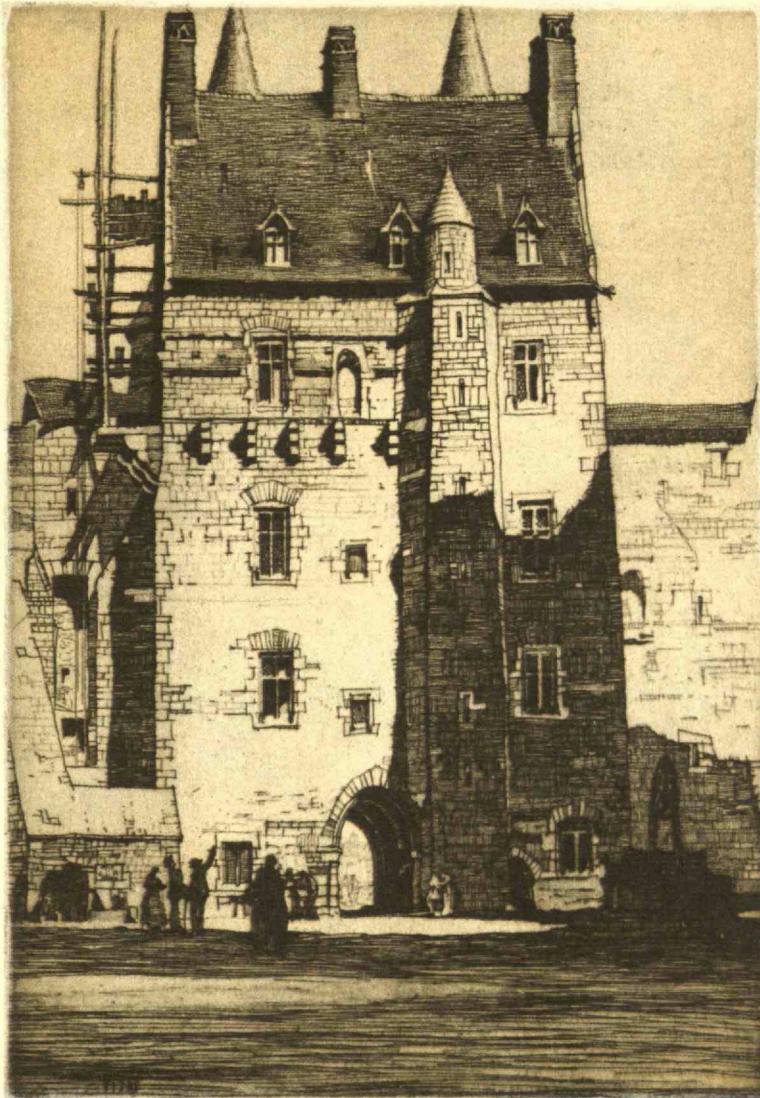


The July TECHNOLOGY REVIEW



RELATING TO THE MASSACHUSETTS
INSTITUTE OF TECHNOLOGY

technology review

Published by MIT

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When Dad was a "Modern Youth"

BICYCLES, stereopticon lectures, and the "gilded" youths with their horses and carts; at night the midnight oil burning in student lamps while the gas lights glared and flickered across the campus—the gay nineties when Dad was in college seem primitive to us to-day.

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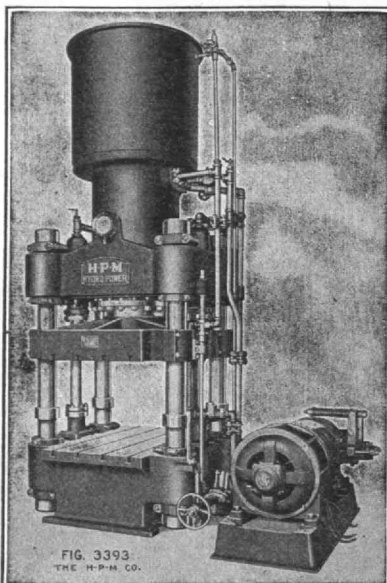
Here is the promised news concerning the latest developments in production pressing machinery.

Always thought that a hydraulic press was a slow-moving machine, didn't you? That was correct — until now! Our work has been the speeding up of hydraulic press action together with giving it a new brand of automatic performance.

It will not be possible to tell the whole story in these letters. I'll hope to give you some inklings as to the possibilities, so that you will write me for details.

In a few words, what our new high-speed press development makes possible is **RAPID PRODUCTION WITH HYDRAULIC FLEXIBILITY**. Consider any production pressing job, requiring any pressure from 100 tons to 2000 tons or more, and which is now being performed by some mechanical type of press. We will provide at least equivalent speed, **PLUS** — flexibility of application; flexibility of performance; flexibility of control.

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Howard F. MacMillin,
Vice-Pres. in charge of Sales,
The Hydraulic Press Mfg. Co.

The TECHNOLOGY REVIEW

Relating to the Massachusetts Institute of Technology

VOLUME 30



NUMBER 8

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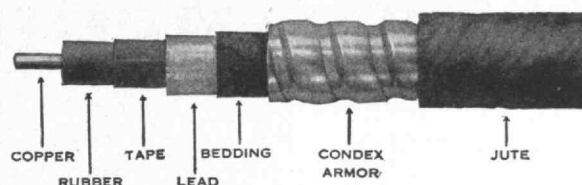
H. E. LOBDELL, '17 Editor
J. R. KILLIAN, JR., '26 Managing Editor
J. D. CRAWFORD, '27 Assistant Managing Editor
R. E. ROGERS } Contributing Editors
J. J. ROWLANDS }

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☐ Photographs and other information will be found in this issue on pages 465, 466, 476-480, as well as 526, 527, and 529.

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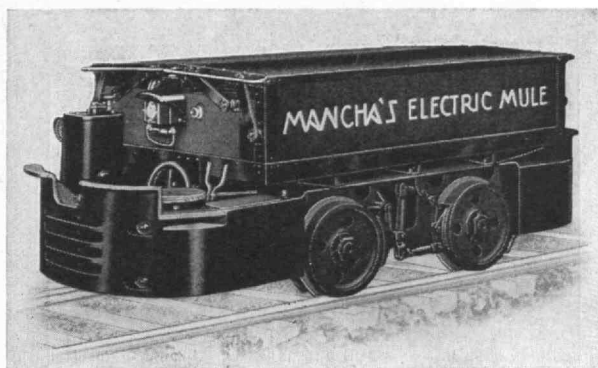
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The Tabular View

IN the eight issues of the volume which closes with this issue, The Review has published 102 news items in its Trend of Affairs section and twenty-two major articles, those totals excluding matter published in the various departments such as Class News and Undergraduate Affairs. Corresponding figures for last volume were 137 and sixteen. The distribution of the news items in this volume is: scientific work at the Institute, 4.0%; scientific work outside the Institute, 13.7%; biographies, deaths, and so on, 12.8%; general Institute news, 26.5%; general alumni news, 43.0%. ¶ The large percentage of general alumni news should be noted; it reflects the unceasing and manifold achievements of Technology men at large. This amount of news in the front of the magazine added to that published in the Class Notes (see comment on this section on page 487) is voluminous evidence of the activity, communicativeness, and fecundity of Institute men, and incidentally of the industry of our own "great silent army," the Association of Class Secretaries.

CONTRIBUTORS to this issue of The Review include a clinician in the field of medicine, an Assistant Professor of Aeronautical Engineering, an industrial chemist, and the managing editor of *The Forum*. ¶ DR. ALLAN W. ROWE, '01, is particularly well known to Technology men because of his interest in all Institute affairs, notably its athletics. Through his scientific work at the Evans Memorial Hospital he has made notable contributions to chemistry and medicine. His article in this issue reflects the nature of some of his research. ¶ WILLIAM G. BROWN, '16, writes the Advisory Committee Report on the Department of Aeronautical Engineering, in which Department he is an Assistant Professor. ¶ ARTHUR D. LITTLE, '85, is the President of Arthur D. Little, Inc. His recent honors are recorded on page 465. ¶ JOHN BAKELESS, Managing Editor of *The Forum* and author of "The Origin of the Next War," prepared the able review, on page 486, of three books on the World War.

IN paying just due to those whose work and contributions have made this volume of The Review more successful than it otherwise could have been, we are like Bassanio, bereft of words, particularly by the inexorably approaching end of this column. Several, however, must not go unnoticed. The drawings of HENRY B. KANE, '24, both humorous and serious have added to the gaiety and appearance of almost every issue. His work, adequate for the present, promises much for the future. ¶ In lending photographs for illustrations, FRANK and WARREN COLBY, premier photographers for the Boston *Evening Transcript*, have been wholehearted and cooperative. ¶ The Rumford Press, manufacturer of The Review, by the quality and efficiency of its personnel, has made the editing of the magazine less a chore and more a pleasure. Many others should be mentioned: persons who have contributed etchings, articles, work, news. The Editors have been appreciative of their contributions, and likewise the readers, if letters and comments received in this office are any gauge.



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There are 73 contracts, an average of 8 contracts per client. The list shows the national extent of our service. Some of the work is abroad. Contracts include new power stations both steam and hydroelectric, extension and modernizing of old power stations, the construction of manufacturing plants, service buildings, office buildings, docks and a variety of other work.

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The TECHNOLOGY REVIEW

VOLUME 30

JULY, 1928

NUMBER 8

The Trend of Affairs

SINCE memory runneth not to the contrary, the Institute's front yard, Eastman Court, has been a barren Sahara. Now and then a new grass patch has been added, or one of the half-dozen scattered trees has been taken away, dessicated and dead, a new victim being installed with the pious hope that it might flourish. Except for such changes the pristine unloveliness has remained undisturbed since Mr. Cram's allegorical figures, the undergraduates of an earlier day, conducted their moonlit revels on the pebbles during the Dedicatory Pageant of 1916. Without an advance sign in the heavens, May 1 saw the beginning of the end. On that day steam shovels, trucks, concrete mixers, and workmen swarmed, not only into Eastman Court, but into Lowell and du Pont Courts as well. The impedimenta of excavating with its noise, dirt, confusion, shouting and agony were on hand. Faculty and students, including all the vociferous Great Court Grouches, were so startled by the agreeable surprise that they suppressed with difficulty an urge to Dionysian celebration.

Progress made at this writing is shown in the photograph on page 467. Grades have been altered, concrete walks laid, grass is soon to sprout where pebbles grew before, there may eventually be placid pools, and enormous scoopings of the Court's underpinning of clam-

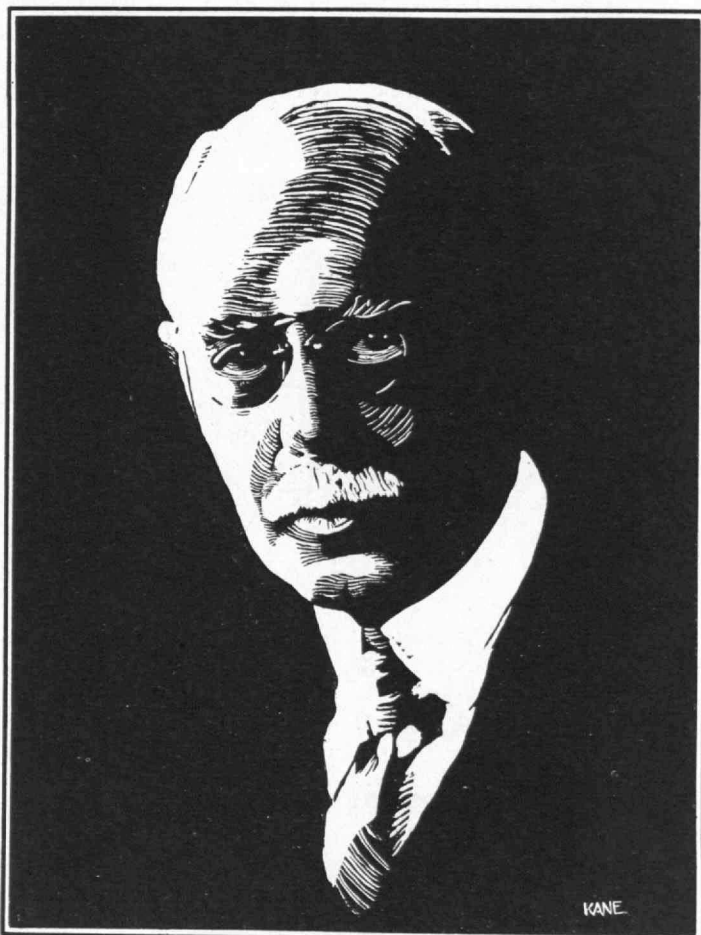
shells and ashes have been replaced by rich loam to nourish all this vegetation. In all, ninety-two trees have been planted. American and English elms are represented and so are sycamores, dogwoods, and lindens. Even a flowering crab is now leafing just outside Eddie Miller's window. The Arnold Arboretum had better look to its laurels.

Within the memory of The Review Editors no physical change at Technology has met with such favorable comment from the many diverse groups of opinion.

Even Major Albert Samuel Smith, Superintendent of Buildings and Power, who is the executive and administrator of the project, believes in it, although he already realizes that 1929 will most certainly see arboreal husbandry added to his manifold responsibilities.

Dedication

YET another time the story of Technology's pioneering in aeronautical research and education was retold when, on June 4, a distinguished gathering of educators, engineers, and leaders in military and civilian aviation witnessed the dedication of The Daniel Guggenheim Aeronautical Laboratory, the gift to the Institute of the Daniel Guggenheim Fund for the Promotion of Aeronautics. President Samuel W. Stratton presided, and after Harry J. Carlson, '92, Life Member of the



From a drawing by Henry B. Kane, '24

ARTHUR D. LITTLE, '85

He is sole nominee for the Presidency of the Society of Chemical Industry of Great Britain. He contributes an article to this issue

Corporation and architect of the new building, had transferred the keys to Everett Morss, '85, Treasurer of the Institute, he made a short address in which he read the Corporation's formal resolution thanking the Guggenheim Fund. Harry Guggenheim, in replying to Dr. Stratton, expressed satisfaction with the building and regretted that his father, Daniel Guggenheim, was unable to be present. He repeated an opinion that he and others had expressed before, "that the airplane in the near future will be as easy . . . and safer to operate than a motor car. Fundamentally, the air is the safest transportation medium and it only requires certain fundamental developments in aircraft which are actually taking place" to confirm it. At the end of seven years, he thought, "We can anticipate a very universal use of the airplane."

Jerome C. Hunsaker, S.M. '12, Technology's first instructor in aeronautical engineering subjects, recalled the early days of the graduate course which was fostered by then-President Richard C. Maclaurin. The laboratory of 1914, the first building on the Cambridge site, was a paper-covered shack which housed a wind tunnel based upon the pioneer tunnels of England, France, and Germany to which the Institute had access through Dr. Maclaurin's many international friendships. This was the first wind tunnel at the Institute except for the one built by the late Professor Gaetano Lanza in 1909, said to have been the first in America. Dr. Hunsaker paid gracious tribute to the "wise counsel and direction" not only of Dr. Maclaurin but of Professor Emeritus Cecil H. Peabody, '77, and Professor Edwin

B. Wilson, now Professor of Vital Statistics in the School of Public Health of Harvard University.

Dr. Stratton next called upon two guests for extemporaneous remarks: Major General James E. Fechet, Chief of Air Corps, U. S. A., and Colonel Edward A. Deeds, consulting engineer and one of the designers of the Liberty motor. Dr. James H. Means, '06, then awarded the James Means Memorial Prize to Samuel Niedelman, '28, for the best essay submitted in competition. This prize he established in memory of his father, James Means, '73, who was one of the pioneer writers on aeronautical subjects in America and one of the first to express a belief in the heavier-than-air machine.

In his dual capacity as Assistant Secretary of the Navy for Aeronautics and Head of the Course in Aeronautical Engineering, Edward P. Warner, '17, extended the

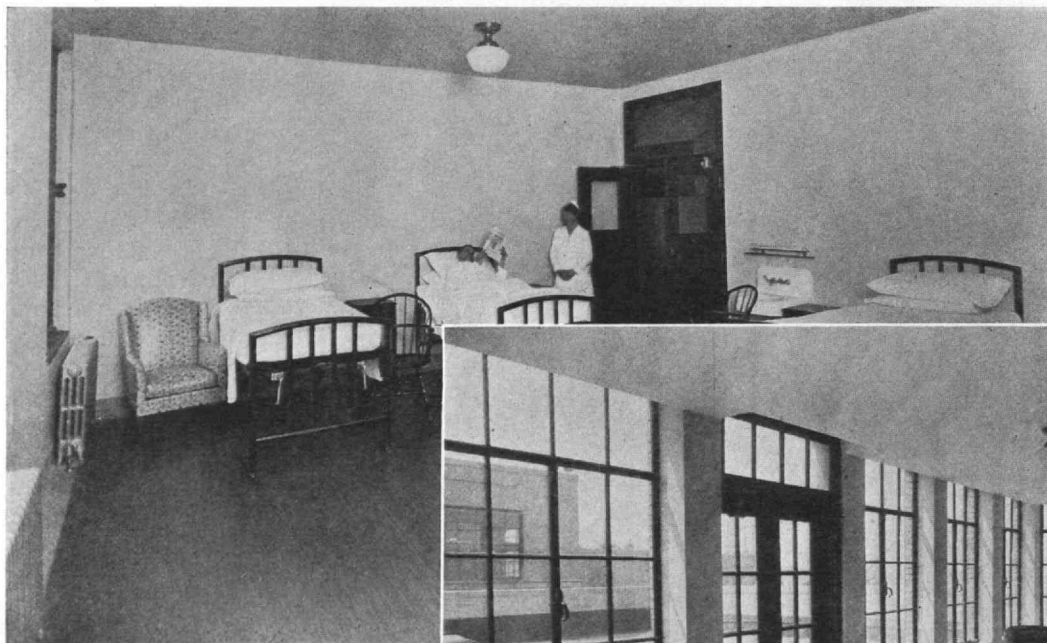


Boston Evening Transcript

SAMUEL W. STRATTON

Conversing with John Hays Hammond

remarks he made in his article in the May Review, "Naval Aviation and the Institute." He, too, was grateful for the work of Dr. Maclaurin and said that it was "a fortunate thing for aeronautical education . . .



Davis

INFIRMARY

Two views in the recently completed Richard Homberg Memorial Infirmary which will be dedicated in October. Above: One of the wards on the third floor. Right: The solarium and the promenade on the fourth floor. The building already is in use





Boston Evening Transcript

JOHN HAYS HAMMOND

Who spoke at the graduation exercises

that President MacLaurin had the prescience to secure Dr. Hunsaker "to organize and to head the aeronautical course here in its beginnings as a separate entity."

The dedicatory address was delivered by Hon. William P. MacCracken, Jr., Assistant Secretary of Commerce for Aeronautics. The ultimate responsibility for keeping this country in the lead in aeronautical engineering, he said, rests "in large measure upon this and

other educational institutions to which both the government and the industry must look for a large majority of their trained personnel. Our air commerce regulations are intended to portray the accepted practices in safe aircraft design and coöperation without stifling or even hindering developments. They are not intended to point the way to engineering progress. That must come through research and through thoroughly trained engineers."

The new aeronautical laboratory will be the most northerly unit on the Massachusetts Avenue façade. It houses two wind tunnels and a meteorological laboratory, as well as class rooms, drafting rooms, a rigging laboratory, a testing materials laboratory, and office space for the research and instructing staff of the Course in Aeronautical Engineering. See page 476 *et seq.*

Graduation

JOHN HAYS HAMMOND, mining engineer of international repute, delivered the address to the Class of 1928 at the Sixty-First Commencement held on the morning of June 5, his subject being "The Engineer." The exercises took place in Symphony

Hall instead of outdoors in du Pont Court on account of the landscaping of the Great Court referred to on page 465.

A total of 577 degrees

were conferred and, as usual, each candidate was handed his diploma by President Stratton who thereby created fifteen Doctors (six of Philosophy, eight of Science and one of Public Health); 165 Masters (six of Architecture and 159 of Science); and 397 Bachelors of Science. In addition he announced the appointment of thirteen "Fellows" for the coming academic year and named the winners of the Rotch Prizes of the Department of Architecture.

Alexander Macomber, '07, President-Elect of the Alumni Association, acted as chief marshal and, with Dr. Stratton, led the academic procession. Professor Harry M. Goodwin, '90, Dean of Graduate Students, escorted Mr. Hammond; Professor Dugald C. Jackson, Head of the Department of Electrical Engineering, Dr. Sidney Lovett, who delivered the invocation; Colonel Harold E. Cloke, Head of the Department of Military Science and Tactics, Major General Preston Brown, who presented commissions in the Officers' Reserve Corps to 106 members of the Class of 1928 who had qualified.

Preceding the fifty-year Class in the procession, marched Professor-Emeritus Robert H. Richards, '68, and Daniel M. Wheeler, '68, to celebrate the Sixtieth Reunion of the Institute's first graduating Class. Members of the Class of 1878, holding their Fiftieth Reunion, were marshaled by Professor Samuel C. Prescott, '94, President of the Alumni Association.

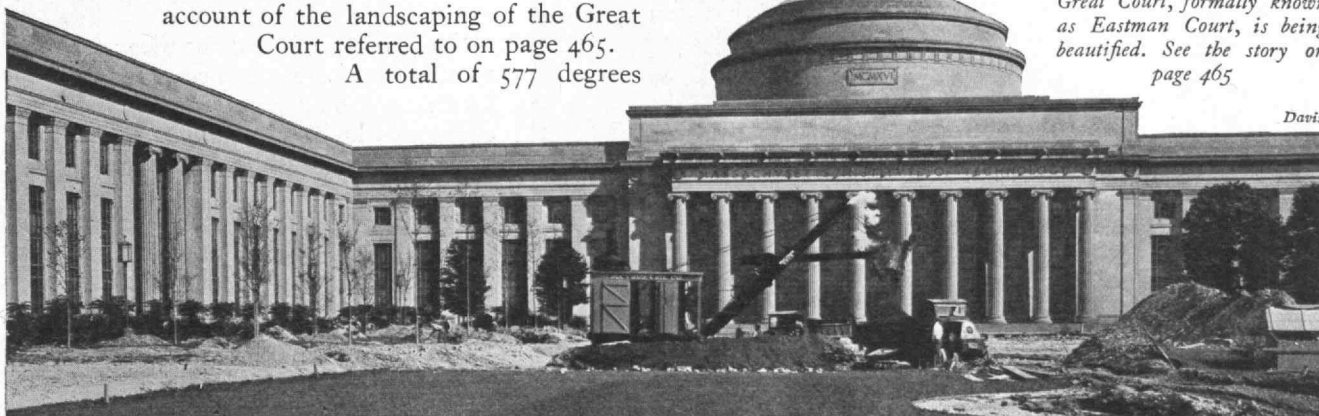
Appointments

AT a meeting of the Corporation on June 1, three new term members nominated by the Alumni Association were elected to office: Lammot du Pont, '01; Frank B. Jewett, '03; and William E. Nickerson, '76. No elections to Life Membership on the Corporation were made because there were no vacancies. The list of Faculty promotions included seven to the grade of Professor, seven to the grade of Associate Professor, and twelve to the grade of Assistant Professor.

The new Professors are: J. B. Babcock, '10, Railway Engineering; J. W. M. Bunker, Biochemistry and Physiology; H. H. W. Keith, '05, Naval Architecture; George Owen, '94, Naval Architecture; M. J. Shugrue, Political Economy; Charles Terzaghi, Foundations; and C. E. Turner, '17, Biology and Public Health.

AT LAST

Photographic proof that the Great Court, formally known as Eastman Court, is being beautified. See the story on page 465



Davis

The new Associate Professors are: S. A. Breed, '93, Drawing and Descriptive Geometry; W. M. Fife, S.M. '22, Civil Engineering; A. C. Hardy, '18, Optics and Photography; D. Peabody, Jr., '10, Applied Mechanics; T. Smith, Mechanism; H. C. Weber, '18, Chemical Engineering; and W. C. Voss, Building Construction.

The new Assistant Professors are: R. G. Adams, '11, Testing Materials; J. C. Balsbaugh, S.M., '24, Electric Power Production and Distribution; M. R. Copithorne, English; H. G. deLaszlo, Physics; D. M. Fuller, English; H. C. Hottell, S.M., '24, Fuel and Gas Engineering; W. A. Liddell, '16, Hydraulic Engineering; E. Mirabelli, '19, Structural Design; H. Muller, Physics; J. A. Stratton, '23, Theory of Electricity and Magnetism; D. J. Struik, Mathematics; and K. L. Wildes, S.M., '22, Electrical Engineering.

The Humanization of Engineering

BETWEEN two and ten P.M. on April 28, 20,000 people eager to see and learn, visited the Institute for the Sixth Annual Open House held under the auspices of the Combined Professional Societies. This student organization, the originator of the idea, yearly coöperates with the various Departments in staging laboratory demonstrations, exhibits, and features interpreting in terms of popular understanding progress in science and engineering. There is a very definite growing interest in technical subjects among laymen, an interest that was manifest in the earnest attention shown and questions asked at various laboratory demonstrations this year. The thirst for more knowledge of what science is doing seemed best satisfied by experiments and exhibits showing the application of recent developments to everyday life.

Students from private and public schools as well as members of various boys' organizations eagerly accept

invitations to Open House. Much that they see has a direct appeal to the youthful imagination. The romance and drama of laboratories and engineering are seen then as they can be seen at no other time, and no doubt have an influence upon prospective students.

Open House serves as nothing else can to make known what goes on within the Institute's innumerable laboratories and class rooms. It gives the layman a new conception of engineering and arouses increasing interest in technical achievements.

Student Probe

LAST December the Institute Committee appointed a "Student Inquiry Committee" to ascertain the composite undergraduate opinion of the Institute's teaching methods and her student-faculty relationships. Such constructive criticism, it was believed, might aid introspective instructors to distinguish their faults from their virtues. The objects sought were: (1) Whether present methods of instruction and social contact between students and Faculty could be improved; (2) The possibility and desirability of such improvement; (3) How to modify the present system to effect such improvement.

The findings—based on answers received from 1,020 students, nearly fifty per cent of the undergraduate enrollment, to a questionnaire propounding nine queries—were formally presented to the Faculty on May 16 by the chairman of the committee, Elisha Gray, '28. Although Mr. Gray's presentation was in the nature of a progress report, for the study is to be continued during the coming academic year, the reception accorded by the Faculty indicates that this "Student Inquiry" may take rank with the report of another Institute Committee rendered in 1917 by which the "Undergraduate Dues" or student tax for the support of athletics came into being.

At the start there was a proposal to conduct the inquiry in conjunction with appointees from the Faculty and the Alumni, but this was discarded that the conclusions might be solely representative of undergraduate views. Consequently the following, in addition to Mr. Gray, assumed full responsibility: J. W. Chamberlain, '28; F. D. Riley, Jr., '28; P. E. Ruch, '28; R. B. Atkinson, '29; R. M. Boyer, '29; A. F. Moore, '29; and H. Rouse, '29. They recommend:

"(1) That instructors be more available to students for conference than they are at present, the definite hours to be indicated clearly by schedule cards on their office doors, and the instructors to be present at the scheduled times.

"(2) That wherever possible the following method of examination be adopted in major courses: a quiz approximately every two weeks, and a final at the end of the term, the final to give a broad picture of the course and not to count more than one-quarter of the ultimate grade.

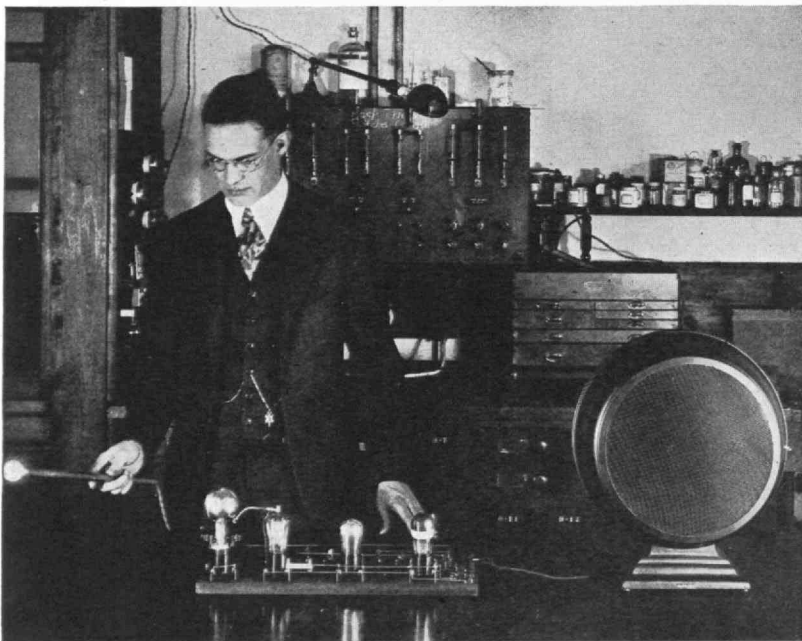


PHOTO-UKOLELE DEMONSTRATED AT OPEN HOUSE

By waving an electric light before a photo-electric cell, controlling the current in a series of vacuum tubes, a full range of musical notes was produced

"(3) That in all courses where it is practicable, type problems and ample problems for practice be required, and that answers be given with all problems.

"(4) That in the first two years any student may request by petition to the Dean, or to a committee appointed by the Dean, that he be assigned to a different section or instructor in a particular course, the petition to be submitted during the fourth week of the term.

"(5) That in first and second year Physics, the proportion of two recitations to one lecture be adopted.

"(6) That the present plan of attendance in the lower classes remain as it is, but that in the junior and senior years attendance for men having a general average of 'Credit' or better for the previous term be made entirely optional.

"(7) That a standing committee of two Faculty members and two students be appointed by the President of the Institute to supervise the effort to develop a closer and more congenial contact between the instructing staff and the students."

Council Meetings

SINCE The Review was last issued, two meetings of the Alumni Council, the 133d and the 134th, have been held. The first of these was the annual joint meeting with the Faculty Club on April 30, twenty-eight members of this latter body attending out of a total of eight-five present. As President of the Faculty Club, Professor Harry W. Tyler, '84, was guest conductor during that part of the evening devoted to entertainment and enlightenment. Few are more adept at *sofeggio* than Professor Tyler; as a veteran of innumerable Faculty Club luncheons he has developed a lambent wit which combines with his patriarchal manner to make him an unexcelled conductor of just such meetings as this joint one.

"Humanics: Its Relationship to Life and its Place in the Curriculum at Technology" was the subject for discussion which confronted him. By careful prearrangement, the two "principal guests" of the evening were the two men who know more than anybody else about Humanics: William E. Nickerson, '76, who conceived and endowed a Chair of Humanics at the Institute; and Charles R. Gow, who will occupy that Chair beginning next fall. At the behest of President Tyler, the first-mentioned explained his conception of the subject of Humanics, and Professor-Elect Gow sketched the method by which he proposed to teach it.

Either President Tyler, Mr. Nickerson, or Professor-Elect Gow, or a combination among the three acted as a catalytic agent on the joint assembly, for a spirited discussion got under way which left veteran and venerable Council members breathless, such was its intensity and volume. There was no controversy and not much discussion over the question of Humanics: the controversy was directed toward a settlement of the question, still vexatious and unsettled two months after, of what Department or organization at the Insti-



PROFESSOR EDWARD F. MILLER, '86

Head of the Department of Mechanical Engineering. This portrait, the gift of his former students, was painted by Orlando Campbell

tute first put into practice the principles of Humanics. Claims were put in, together with counter-claims, by everybody from the Head of the Department of Electrical Engineering down to the Secretary of the Technology Christian Association. It has been many a day since the Council was privy to such energetic and well-taken talk. Such was its nature that it moved Isaac W. Litchfield, '85, to rise and paraphrase a line or two of Browning's "Pippa Passes," which in turn moved Bursar Horace S. Ford aptly to bring the meeting to a jocund close with a joke about a hotel porter who would be courteous.

Preceding that part of the meeting devoted to Humanics and conducted by Professor Tyler was a business meeting of the Council, presided over by its President, Samuel C. Prescott, '94. The election of twelve class representatives to the Council was announced: 1869, H. A. Carson; 1874, G. H. Barrus; 1879, C. S. Gooding; 1884, A. H. Gill; 1889, E. V. French; 1894, S. C. Prescott; 1899, W. A. Kinsman; 1904, H. M. Haley; 1909, A. L. Shaw; 1914, H. B. Richmond; 1919, G. H. Wiswall, Jr.; and 1924, J. O. Holden.

Accepting the report of the Nominating Committee, the following elections to standing committees were made: *Assemblies* — (For five years) H. B. Shepard, '16; *Historical Collection* — (For five years) J. P. Munroe, '82; *Permanent Funds* — (For three years) H. S. Ford, Bursar.



VISAGRAPH

R. E. Naumburg, '16, with his device for enabling the blind to read

Accepting the report of a Special Nominating Committee, the following elections to Advisory Councils were made: *Athletics* — (For three years) J. A. Rockwell, '96; *Boat House* — (For three years) A. W. Rowe, '01; *Musical Clubs* — (For three years) C. A. Whittemore, '01; *Tech Show* — (For three years) D. L. Rhind, Assistant Bursar; *Undergraduate Publications* — (For six years) W. Prescott, Faculty; *Walker Memorial* — (For three years) M. B. Dalton, '15; *Flying Club* — (For three years) G. L. Cabot, '81, Chairman, and E. P. Warner, '17; (For two years) P. H. Adams, '14, and G. J. Mead, '16; (For one year) Lt. A. F. Hegenberger, '17, and C. H. Chatfield, '14.

The last meeting of the year on May 28 was given over to the reports from the officers and committee chairman, most of them read off in the powerful drone of the Secretary-Treasurer. Only a scandal among the tellers in the elections to the Nominating Committee; an authoritative play by play account of the cow-on-the-dormitory-roof incident of the previous day; and a spirited oration upon the present method of electing term members to the Corporation by Allan W. Rowe, '01 — only these disturbed the uneventful calmness of the evening. Henry F. Bryant, '87, Vice-President of the Alumni Association, presided in the absence of President Samuel C. Prescott, '94.

Altogether, twenty reports were presented to the meeting following that of the Secretary-Treasurer, Orville B. Denison, '11, who reviewed the Alumni Association's year. There are 13,134 members of the Alumni Association, he said, fifty-one per cent of whom are in good standing with their dues paid. The Committee on Historical Collection reported that progress was being made in its compiling of a

biographical catalogue, with photographs, of the men prominent as teachers or administrators at Technology since the beginning.

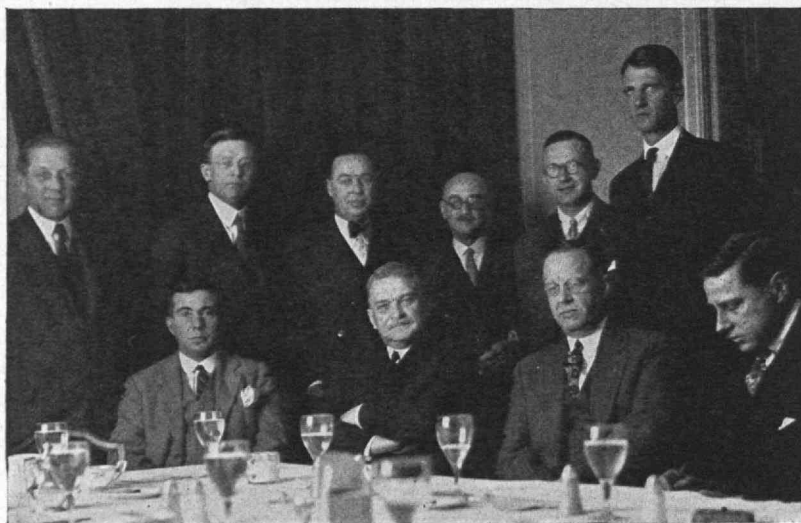
Professor Prescott, Dr. Rowe, and Mr. Denison were elected to the Nominating Committee for a term of three years, and E. F. Hodgins, '22, the author of Tech Show for 1922, was elected a member of the Advisory Council on the Show. Dr. Rowe, the chairman of the Council's committee to study the method of nominating term members on the Corporation, deliberately attempted to set going a discussion by stating the objections to the present plan advanced by both voters and candidates. He drew comment from B. Dewey, '09; E. B. Rowe, '06; G. L. Gilmore, '90; I. Bowditch, '00; F. Bernard, '17; and the Chairman, Mr. Bryant.

Atlantic City Reunion

EIGHTY-FIVE attended the Reunion of the Technology Clubs Associated held in Atlantic City, May 25 and 26. With the exception of a dinner dance, there were no meetings or formal gatherings, no suggestion of the elaborate conventions such as that of last year in New York, which the Association has arranged in the past. Instead, the guests furnished their own entertainment.

There being no business meeting, the executive committee elected the new officers for the forthcoming year — President: Maurice R. Scharff, '09, Pittsburgh; Vice-Presidents: Richard H. Ranger, '11, New York; George K. Burgess, '96, Washington; George E. Merryweather, '96, Cleveland; John L. Shortall, '87, Chicago; J. Lawrence Mauran, '89, St. Louis; Secretary-Treasurer *ex officio*, the Secretary-Treasurer of the Alumni Association.

It was decided, it will be recalled, at the New York Convention in June, 1927, that the next Convention would be in the spring of 1928 at Pittsburgh, the Technology Club of Western Pennsylvania acting as host. Once before, in 1915, the T. C. A. held its convention in Pittsburgh.



Boston Evening Transcript

"BOOST NEW ENGLAND"

Officers of the New England Council and speakers at a recent Research in Industry Conference of the Council. President Stratton, seated second from the left, spoke

22 East Thirty-Eighth Street

ON page 520, the new Secretary of the Technology Club of New York touchingly relates how Kaludy Spalding, '89, shed a tear or two when the Club he has tended so long debouched on May 31 from the old Girard mansion at 17 Gramercy Park, its home since 1909. Not long did he remain lachrymose, however, for his tears, according to Secretary Holderness, were stanchd by smiles when he appraised the new quarters obtained in the Fraternity Clubs Building at 22 East Thirty-Eighth Street, its home until the airy Technology Center assumes a local habitation and a name, or the Club acquires a structure of its own. A sense of artistic restraint implies that the story of The Removal should be begun and concluded with this simple incident, bathos and pathos included, but a few practical details of the new arrangement had better be added.

The section of the Fraternity Clubs Building given over to the Club includes a large lounge room, a room for billiards and cards, and grill room reserved exclusively for the Technology Club. Bedrooms are available for either transient or residential occupation and advance reservations may be made by writing or wiring the Club headquarters. Available elsewhere in the building are squash courts, gymnasium, oyster bar, barber shop. Further details, more intimate and esoteric, are given in the Secretary's report referred to above.

Visagraph

DEVELOPMENT of a device, the visagraph, enabling the blind to read ordinary letterpress was recently announced by Robert E. Naumburg, '16, and once again focuses attention on the

successes achieved by educators of the sightless during the last 150 years. In 1785, at a French institution, Valentin Haüy put into use a crude system of reading by a sense of touch. Louis Braille (1806-1852), a blind Frenchman, is usually considered the father of the touch method of reading, although the point system which he employed was the development of a similar one devised by his countryman, Charles Barbier.

While these pioneers were working in France, teachers of the blind in Boston (in particular, Dr. Samuel G. Howe of the Perkins Institution) were employing a system of raised or relief letters known as the Boston Line Print. Although this subsequently gave way to a modified Braille, during the time of its use it made possible the remarkable progress achieved by the Bostonians in educating the blind — a cause which, in the Americas, received its earliest recognition and impetus from New Englanders. (Charles F. F. Campbell, '01, the son of a blind associate

of Dr. Howe's recorded in the February, 1924, Review his pioneering work in finding a place for the blind in industry.)

It is significant that the latest advancement, the visagraph, likewise comes out of New England. The press has lately recorded with more energy than precision the operation of Mr. Naumburg's visagraph. A hair-like ray of light (five-thousandths of an inch in diameter) is obtained from a projector mounted upon a pantographic leverage by which the reader manually moves the ray over the printed page of an ordinary book secured in a holder. The moving ray of light, as it is reflected from the white paper or absorbed by the black letters, influences the passage of a current of electricity through a selenium cell placed in circuit with a buzzer. It will be recalled that selenium is a conductor of



LEVY MEDAL

Won by Prof. Vannevar
Bush, Eng.D '16



ON THE LANDING AT KHARTOUM, SUDAN

Wide World

George Eastman, who has been making a trip in Africa, had this photograph taken at the junction of the White and the Blue Nile with two famous teams of cameramen: the Martin Johnsons, and Cooper and Schoedsack. Mr. Eastman is standing fifth from the right

electricity when exposed to light and a non-conductor when unexposed. When the light ray impinges upon the black parts of a printed letter there is no reflection, hence no passage of current, therefore no buzz. By moving the light ray and listening to the buzz — or if the blind person be also deaf, by feeling a vibrator — the reader may distinguish letters, words, sentences.

Previously, the blind have been limited to the few expensive, specially prepared books of the Braille or raised letter type. The successful application of this new apparatus and its mastery by the blind will open to them the whole field of printed matter.

Sundry Honors

AT the Medal Day meeting of The Franklin Institute on May 16, that society awarded Howard N. Potts Medals to Oscar G. Thurlow, '04, for his invention of the backwater suppressor, and to Dr. Edmund C. Sullivan, and William C. Taylor, '08, for their development of Pyrex glass, in addition to its Louis Edward Levy Medal to Vannevar Bush, Eng.D. '16, as reported in the May Review. Other medal recipients were Henry Ford and Charles L. Lorimer, designer of the Wright Whirlwind Motor.

Five members of the Faculty were numbered among the thirty-three new Fellows of the American Academy of Arts and Sciences, whose names were made public on May 18. They are Professors L. J. Gillespie of Physico-Chemical Research, G. Scatchard of Physical Chemistry, J. W. M. Bunker of Biochemistry and Physiology, C. Tertzaghi of Foundation Engineering, and M. S. Vallarta, '21, of Physics. Two alumni are included in the list of twenty-one new Associates of the Academy: E. J. Holmes, '93, and O. Roberts, '88. E. B. Wilson of the Harvard School of Public Health and former Head of the Department of Physics at Technology was reelected President and A. E. Kennelly, a former Professor in the Department of Electrical Engineering, was reelected a Vice-President. Other reelected officers are: R. P. Bigelow, Professor of Zoölogy and Parasitology, as Corresponding Secretary; I. Bowditch, '00, as Treasurer; H. M. Goodwin, '90, Dean of Graduate Students, as Librarian; W. S. Franklin, Professor of Physics, as Editor. C. A. Kraus, '08, and W. Cameron Forbes, Life Member of the Corporation, were chosen Councillors of the Academy to serve four years.

The Institution of Civil Engineers of Great Britain celebrated the 100th anniversary of the granting of its charter during the week of June 3. As the official representatives of the American Society of Civil Engineers, Allen Hazen, '88, past Vice-President, and George T. Seabury, '02, Secretary, were present. Mr. Seabury is also an official delegate of the A. S. C. E. to the dedication of the Louvain Memorial to the American engineers who lost their lives in the World War. This is to take place on July 4, and Edward D. Adams, '69, representing the American Institute of Electrical Engineers, is the Chairman of the committee of delegates.

Other recent honors to Technology men include the following:

CASS GILBERT, '80: Elected President of the American Academy of Arts and Letters.

ARTHUR D. LITTLE, '85: Nominee (equivalent to election) for the Presidency of the Society of Chemical Industry of Great Britain. (See page 465.)

WILLIS R. WHITNEY, '90: Awarded the Gold Medal of the National Institute of Social Sciences "in recognition of distinguished social service in promoting and leading electrical research with its widespread favorable reaction upon human progress."

JOSEPH H. FREEDLANDER, '91: Awarded the Gold Medal and first prize of the Fifth Avenue Association (New York) for the National American Building of which he was the architect.

ALFRED V. DE FOREST, '11: Awarded the Charles B. Dudley Medal of the American Society for Testing Materials in recognition of a "meritorious" paper on research in engineering materials.

RALPH T. WALKER, '11: Appointed architect for the coming World's Fair in Chicago.

Charles Henry Louis Napoleon Bernard

STUDENTS at the Institute between 1892 and 1901 will remember Charles Henry Louis Napoleon Bernard, Instructor of French, who died at his home in Boston on June 4. Although born in Paris he was a naturalized American citizen much interested in amateur dramatics, both in English and French. While at Technology he was instrumental in inaugurating the production of French classic plays and left to take charge of the Harvard French plays given each year under the auspices of the *Cercle Français de l'Université Harvard*. He made free use of a sharp wit in his classes, to which the *Techniques* of the period bear testimony.

Technology Etchers: Louis C. Rosenberg, '13

BORN in Portland, Oregon, of Swedish stock, in 1890, Mr. Rosenberg began the study of architecture in 1906. A few years later he won a scholarship which enabled him to attend the Institute, and while taking his course here, he was awarded a traveling fellowship which he was unable to use until 1920 because of the intervention of the World War. Of late he has been in various parts of Europe, etching and studying — in particular, under Malcolm Osborne, A.R.A., at the Royal College of Art.

His *Chatelet, Vitre*, reproduced on the cover of this issue was executed in 1924, and in 1925 it was awarded the Logan Prize of the Chicago Society of Etchers. Like most of his other work, it reveals an architectural feeling softened and animated by a sense of the pictorial.

Chatelet, Vitre, is reproduced through the courtesy of the Casson Galleries.

THE REVIEW is not published during the summer months following July. This issue concludes Volume XXX. Number 1 of Volume XXXI will be published on October 27, and dated November. Readers who bind their copies of The Review are reminded that if they possess eight numbers of Volume XXX, their files are complete. An index to the Volume will be ready on September 15 and will be supplied post-free upon request. Bound volumes will be furnished at cost.

The Endocrine Glands

The Public Hears Much Speculation and Little Truth about Endocrinology. The Following Article Summarizes Some Scientific Facts about the Ductless Glands

By ALLAN WINTER ROWE, '01

DURING the past few years in part as the result of growth of knowledge and in part through newspaper and literary exploitation of their alleged activities, interest in the so-called Endocrine Glands has become widespread. The press and the novelist have popularized what must regretfully be designated as misinformation concerning them and needless to say, the vendor of proprietary preparations has profited by this in large degree. The present statement is made, therefore, to place before the readers of The Review some of the facts concerning the so-called endocrine system and to expose some of the fallacies which have gained popular acceptance.

In the first place there are but few of the glandular structures of the body which have been demonstrated to produce a so-called internal secretion which influences the functions of other portions of the body. These are enumerated below.

The pituitary body or Hypophysis is a glandular structure which lies within the skull at a point roughly at the intersection of lines drawn from front to back through the base of the nose and from temple to temple at the level of the eyes. The gland, or glands, for there are at least two functioning bodies in this tiny mass of tissue, are partly enclosed by a bony structure known as the sella turcica. This gland plays an important part in the regulation of growth, of development, and of sexual activity.

The Thyroid, consisting of two depending lobes and a connecting isthmus, lies in the anterior portion of the lower part of the neck. Like the pituitary, it also influences growth, development, and sexual activity as primary functions.

The Para-Thyroids are tiny glandular structures, associated with the thyroid as their name would imply,

but differentiated from it in both structure and function. Less is known of these glands, but there is reason to believe that they play an important part in the regulation of the calcium exchange in the body, that element which aside from building our bones, plays so many significant rôles in the regulation of bodily function.

The Suprarenals are structures which are found superior and adjacent to the kidneys. Like the Pituitary, the tissue mass contains two independent structures, the medulla, or central portion, and the cortex, or covering. The internal secretion of the former portion, epinephrin or adrenalin, as it is known commercially, was the first active principle of an endocrine gland to be isolated and prepared in pure form. It plays an important part in medicine today, and in addition is believed by many to exercise a series of important regulatory functions.

The Gonads, the term used to designate the primary sex organs of the male and female respectively, are usually regarded as very important endocrine organs. In so far as the female is concerned, there can be but little question that this assumption is well founded. Of the male, on the other hand, there is definite doubt if there be an important endocrine contribution from the Gonads, at least during adult years. The rejuvena-

tion experiments of Steinach and of Voronoff, operative procedures which have been the most widely heralded of all endocrine discoveries in popular literature, have but little to support them in their respective claims, so far as the human race is concerned. On the other hand, there exists a definite amount of clear-cut, proved, and tested fact which denies the claims made for these rejuvenation procedures and seems to show that the only betterment to be expected from them lies in the subjective aspects of mental origin.

DR. ALLAN WINTER ROWE, '01, is Chief of Research Service at the Robert Dawson Evans Memorial for Clinical Research and Preventive Medicine—an institution which embodies a generous gift of the late Mrs. Antoinette Evans to the welfare of the public. Organized, as the name implies, for research in diverse fields of medicine, it maintains departments in clinical research, biochemistry, immunology, bacteriology, pathology, physiology, pharmacology, and several of the specialized branches.

It is housed in its own building which accommodates the staff of laboratory workers and also provides suitable accommodations for some thirty patients who are received for study and investigation. There is a consulting staff of about thirty physicians, recognized experts in their specialized fields, and in addition, a similar group of technically trained workers into whose very competent hands falls the conduct of the many elaborate procedures.

Under Dr. Rowe's direction research studies are initiated along purely scientific lines and the results of these, where successful, are then applied directly to the study and care of the sick. Special emphasis has been laid on objective methods of diagnosis, particularly as applied to the determination of functional derangement of the so-called endocrine glands of which the accompanying article treats.

The Pancreas is a gland serving a double purpose, as its cells both formulate materials which ultimately become digestive juices chiefly concerned with the preparation of our food for absorption, and in addition, another group of cells prepares a something which is concerned with the regulation of the consumption of starches and sugars in the body. Extracts from these cells under the name of insulin are now articles of commerce, and enable the physician to palliate the grave disease, diabetes, which results from a failure of the pancreatic cells to produce this necessary material.

A number of other body structures have been considered to possess endocrine attributes, but the case for each of them is by no means well established and in some instances, at least, can be regarded only as the result of pure speculation. Manufacturers of glandular extracts have conferred upon structures in the body an endocrine activity which science has been wholly unable to verify. Glandular extracts, so-called, from the vermiform appendix, the brain, and other dubious endocrine sources, are articles of commerce, and it remains only for some thrifty manufacturer to offer for sale an endocrine extract of the teeth as a cure for their decay.

Now, to consider briefly the results of disturbed function in these several endocrine glands. It should be stated as a preliminary that theoretically at least a gland is capable of producing, under disease conditions, amounts of active principles in excess or below that conditioned by normal function. In addition, there is an intermediate state which may be termed "dysfunctional" in which manifestations of both an over- and an under-activity are to be observed at the same time. That this can readily follow is apparent from the fact that a gland initially over-active may undergo functional involution, ultimately arriving at an under-active state. During the transition period, however, as all of the attributes of over-activity do not subside with equal speed, the intermediate state, partaking of both extremes, comes into being.

Over-activity of the anterior lobe of the pituitary in the years of childhood, before maturity begins, will condition excessive over-growth and the real giants of today are the results of such an abnormal function. Equally, an under-activity retards growth, and one type of dwarf results from this phase of morbid pituitary function. Where growth has been attained, however, prior to the disease of the gland, other manifestations come more into play. An over-activity of both lobes of the pituitary determines that condition known as acromegaly, a state in which the hands and feet and certain bony structures of the skull attain a marked overgrowth. Where the condition exists before maturity, we get gigantic stature as well, but the growth of the hands, feet and lower jaw, particularly, characterizes the condition at whatever age in life it may appear. With other disturbances of the gland we may get a marked obesity. In one case of the writer's, for example, a boy eleven years old and less than five feet in height reached a weight of 400 pounds. With this there may be a mental arrest, although in many pituitary cases of later onset the level of mentality is well above the average. As will be taken up later on, arrest of sexual develop-

ment and in some cases sterility are among the possible results of pituitary disease. Where there is tumor growth of the gland, with resulting pressure inside the head, loss of vision may result. Severe headache is a feature of pituitary disease, although several of the other endocrine glands produce the same result. Progressive deafness may arise from pituitary disorders or those of the thyroid and ovary.

With the thyroid there exist several disease conditions in some of which the gland is notably enlarged. In certain districts, for example, an enlarged thyroid or, as it is called, goitre, is in large measure common to the community. Such increase in size does not necessarily connote an altered secretory activity; where enlargement is unaccompanied by functional change one speaks of benign or non-toxic goitres. Where the thyroid enlargement is associated with an over-production of secretion we frequently have in addition a very rapid heart, a protrusion of the eye balls, an intense nervousness, and progressive emaciation. These features determine the picture of so-called exophthalmic goitre. In severe cases surgery offers the only means of improvement. The opposite picture from the foregoing is that in which the thyroid is under-active. This determines a progressive obesity, a loss of hair and a slowing down of the mental and physical powers. In many cases the skin becomes thick and lifeless, a fact which has given to this disease picture the name myxedema. Where thyroid deficiency occurs at birth or in early childhood, the unfortunate victim becomes what is known as a cretin, a stunted, arrested, dwarfish imbecile. This condition is common in certain parts of the world where the so-called endemic goitre is also found. Another type of thyroid failure which has been recognized and described by the writer and his associates is almost the opposite picture of that just presented. The patients are thin and not fat, they are mentally alert and not sluggish, but they are profoundly fatigable, a condition common to all endocrine failures, and they present the laboratory picture characteristic of hypothyroidism.

Little is known of the results of disease conditions of the para-thyroids. Their removal causes death, with convulsive seizures described as tetany, and the so-called chronic condition termed idiopathic tetany is usually ascribed to their lowered functional activity. Speculation has assigned a large number of other disease conditions to para-thyroid failure, but tested facts supporting these designations are notably lacking.

Degeneration of the adrenals produces the so-called Addison's disease, a progressive, wasting, inevitably fatal condition characterized by marked weakness, gastro-intestinal disturbances, and usually a brown pigmentation of the skin. Over-activity of the glands is less well understood, but one type of precocious maturity and the condition known as virilism are usually regarded as deriving from tumors of the cortical portion of the gland. In the first, puberty may appear in the first few years of life; in the second, adult women lose in part their secondary sex characteristics and the whole body configuration tends to approach that of the male.

As was stated above, failure of the pancreas in those cells concerned with the production of insulin, produces

the disease diabetes, associated primarily with high blood sugar levels and the loss of large quantities in the urine.

The conditions described above are all to be characterized as severe terminal phases of disturbed function. There are many individuals in whom low-grade chronic functional disturbances exist which never, however, become sufficiently well defined to define the disease pictures given above. On the other hand, they determine a condition of ill health for the sufferer.

The measures to be used for correction depend upon the character of the functional disturbance. For over-activities in general, such as pituitary tumor and hyperthyroidism, surgery offers the course of election. With mildly over-active thyroids, the x-ray is sometimes substituted and iodine medication may produce some betterment, though usually of a transitory character. Over-activity of the adrenals cannot be corrected as the gland is essential to life. Over-activity of the gonads, so far as dependable evidence is concerned, is a non-existent condition. The designation of over-activity is determined by speculation, and arises from what the individual writer regards as an excessive sex urge, a function in no sense wholly dependent on endocrine activity although usually associated with it.

For under-activities, on the other hand, there is a direct method of approach in the administration of extracts from the glands taken from other animals. Reliable preparations of pituitary, thyroid, and ovary are obtainable; adrenalin while of no great therapeutic value in combating hypo-adrenal conditions, can be synthesized in the laboratory, while insulin, the direct palliative of diabetes, is the recent brilliant discovery of a group of young Canadian investigators. These glandular products are in no sense to be regarded as drugs. Their use constitutes a replacement therapy, an administration from external sources of necessary material which, under conditions of health, the individual draws from his own internal resources. For this reason it is of vital importance that, as a preliminary to the administration of a glandular product, a careful examination should be made to determine the gland at fault. The administration of a glandular product to an individual whose own gland is normal in

function, will produce no betterment and may do grave and serious damage. Furthermore, it is impossible in many cases to establish such a diagnosis without a careful objective study, as many of the glandular disturbances produce end results which are clinically identical. For example, disturbed menstrual function does not mean, necessarily, primarily ovarian failure; in such cases the administration of ovarian extract wastes the patient's time and money without any return. If the disturbance results from a thyroid failure or functional error of the pituitary, then the use of the appropriate medication for correction of the primary difficulty will equally correct the resultant condition as well. One last word in regard to poly-glandular syndrome, a complex popular alike with the speculative endocrinologist and the drug manufacturer, has seemingly no certain existence in actuality. In a series of over 3,000 cases the writer has seen but two or three patients in whom he was unable to determine a primary cause of disability. Under these conditions he feels that the greater probability of explanation lies in his ignorance rather than in the existence of the poly-glandular syndrome. The use of "mixed gland" preparations medicinally, is to be interdicted as strongly as possible. With but one gland at fault, the administration of what can only be designated as an endocrine hash, means that if enough material of the gland at fault be given to produce benefit, all of the other normally functioning glands will be over-stimulated in such a way as to produce a more than balancing detriment. In any clinic dealing with endocrine cases the victim of a previous enthusiastic and misguided poly-glandular medication is a not infrequent sight.

To summarize then, with certain symptoms, suspect endocrine disease. Verify this suspicion by careful and thorough investigation (fully one-third of the cases suggesting endocrine disease have some non-endocrine disability which is the cause of their trouble). Determine so far as it is humanly possible if the case be endocrine, the single gland primarily at fault, and then, and then only has any one a right to expect betterment from the use of glandular medication. Where needed, it will save life in extreme cases; wrongly given, it may destroy.



Advisory Committee Report: Department of Aëronautical Engineering

The Secretary's Record of the Recent Meeting Held at the Institute. Published by Arrangement with the Corporation Executive Committee

LAST autumn the Advisory Committee for the Department of Aëronautical Engineering held its first meeting at the Institute. The following members of this Committee were present on October 21 to discuss the policy and current problems of the Department: Paul W. Litchfield, '96, President of the Goodyear Tire and Rubber Company; the Honorable Edward P. Warner, '17, Assistant Secretary of the Navy for Aëronautics and in charge of the Institute's Course in Aëronautical Engineering; Admiral H. I. Cone, Vice-President of the Daniel Guggenheim Fund for the Promotion of Aëronautics; Godfrey L. Cabot, '81; Mr. Richard F. Hoyt; Jerome C. Hunsaker, S.M. '12, Mr. Thomas Huff, '15; and Captain Edwin E. Aldrin, '17. In addition the Department was represented by Professors Charles H. Chatfield, '14, Charles F. Taylor, William G. Brown, '16, and Messrs. Shatswell Ober, '16, and John R. Markham, '18, Research Associates.

II

President Stratton opened the meeting by outlining the object of the Committee and the present status of the Course in Aëronautical Engineering. He said that this Advisory Committee had been constituted to carry out the policy of keeping the departments of the Institute in contact with the industry, and that one of the direct benefits resulting will be that the Corporation and members of the staff will have the advice of members of the Committee. The specifications for instruction at Technology should be set by men who would ultimately employ the graduates.

Of the future of aëronautical engineering, Dr. Stratton said that Technology had always been optimistic, but had generally underestimated progress made. He outlined some of the new developments abroad, and said that although he felt the United States led in most matters, he had seen certain things in Europe which we

ought to heed. He spoke of the necessity of keeping in touch with conditions abroad and mentioned the fact that a number of the Institute's staff were visiting Europe. The Course in Aëronautical Engineering had, he said, approximately 155 students. It has already grown to the size of some of the oldest courses at the Institute. The demand for training in aëronautical engineering now makes it possible to select the best of the material available and give advanced training to these students with exceptional ability.

Equipment for the new building is already being taken care of. The needs of the Department in connection with it have been thoroughly surveyed. There is considerable space available behind the new building for more laboratories where it may be advisable to locate a larger wind tunnel and also provide a laboratory for aviation power plant work.

In outlining the instruction in airplane design as given at the present time, Professor Chatfield said that until last year Technology has offered only graduate instruction in aëronautical engineering. "In 1926 a regular undergraduate Course was started at the Institute. The first two years and the first part of the third year in this undergraduate course are like the first two years in other courses, in which

The Committee Personnel

THE following men constitute the membership of the Advisory Committee on Aëronautical Engineering:

- CAPTAIN EDWIN E. ALDRIN, '17, *Office of the Chief of Air Corps, Wright Field, Dayton, Ohio.*
GODFREY L. CABOT, '81, *President, Godfrey L. Cabot, Inc., 940 Old South Building, Boston.*
ADMIRAL H. I. CONE, *retired, Du Pont Apartments, Washington, D. C.*
HENRY M. CRANE, '95, *Technical Assistant to the President, General Motors Corporation, 40 East 54th Street, New York, N. Y.*
DONALD W. DOUGLAS, '14, *President of the Douglas Company, Santa Monica, Calif.*
LESTER D. GARDNER, '98, *250 West 57th Street, New York, N. Y.*
HARRY F. GUGGENHEIM, *Daniel Guggenheim Fund for the Promotion of Aëronautics, 598 Madison Avenue, New York, N. Y.*
LT. ALBERT F. HEGENBERGER, '17, *Materiel Division, Air Corps, Wright Field, Dayton, Ohio.*
RICHARD F. HOYT, *Hayden, Stone and Company, New York, N. Y.*
THOMAS H. HUFF, '15, *Huff Airplanes Inc., Perth Amboy, N. J.*
JEROME C. HUNSAKER, S.M. '12, *The Bell Telephone Laboratories, 463 West Street, New York, N. Y.*
PAUL W. LITCHFIELD, '96, *President, Goodyear Tire and Rubber Company, Akron, Ohio.*
GEORGE J. MEAD, '16, *Vice-President, Pratt and Whitney Aircraft Company, Hartford, Conn.*
HENRY A. MORSS, '93, *Treasurer, Simplex Wire and Cable Company, 201 Devonshire Street, Boston.*
COMMANDER E. E. WILSON, *Navy Department, Washington, D. C.*
THEODORE P. WRIGHT, '18, *Chief Engineer, Curtiss Aeroplane and Motor Corporation, Garden City, Long Island, N. Y.*



DANIEL GUGGENHEIM AËRONAUTICAL LABORATORY

Weber

The new home of the Department of Aëronautical Engineering, dedicated June 4 (see page 465), houses class rooms, laboratories, two wind tunnels, and a meteorological laboratory

attention is given to physics, mathematics, and chemistry. With the second term of the third year, the student begins aëronautical subjects. His introduction comes through courses in structures and aërodynamics. Time is allowed for the study of modern languages by requiring that shop work, foundry, and so on, be taken during the summer session. In the fourth year, the training in structures and aërodynamics is applied to airplane design. Under the present arrangement, a man is not turned loose on design until he has had the prerequisite training in structures and aërodynamics. In the fourth year additional time is allowed for machine design and electrical engineering." Professor Chatfield stated that there were two reasons why the Course was made as broad as possible. "In the first place, aëronautical engineering organizations are small, and a graduate of the Course may be the only technical man in a given factory, and may be called upon to solve all sorts of engineering problems. In the second place, there is a feeling that graduates of this Course may find it advantageous to go into other lines of engineering."

In speaking of the size of the Course, Professor Chatfield said that for 1927-28 the registration was: sixty freshmen, forty-five sophomores, thirty-five juniors, fifteen seniors, and thirteen graduate students. These figures do not include military students who are not enrolled in aëronautical engineering, but who are taking aëronautical subjects; R. O. T. C. students and Naval Constructors detailed to Technology, for example. The total of students taking aëronautical subjects is between 250 and 300.

Professor Warner added to Professor Chatfield's re-

marks by saying that the Aëronautical Engineering Course has centered about airplane design. "As far as possible the temptation of specializing in either aërodynamics or structures has been avoided. In teaching airplane design an attempt has been made to trace back all facts to the fundamental branches of science and to use airplane design as an illustration of the application of fundamentals to engineering. By this method of instruction the mystery is taken out of aëronautics, and the student, if he forgets a particular engineering formula, can reproduce it by the fundamentals of physics and mechanics. As far as possible the subject of airplane design should be given by one man or two men who work in close coöperation. There is a lack of enthusiasm in designing airplanes never to be built. As a result, it may be desirable to tie in the actual building of an airplane with the design work and carry out in the shop practice the construction of the best design submitted during the year, and further to hold out as an incentive to the winner of the best design an opportunity to be retained as an instructor in the department."

III

In connection with this discussion of the course in airplane design it was pointed out by Dr. Stratton that the coöperative factory idea, as already worked out in the Course on Building Construction, might be applied to aëronautical engineering. "This is a point that ought to have considerable discussion."

Following these remarks on airplane design, Dr. Stratton called on Professor Taylor who is in charge of airplane engine design. Professor Taylor said that the

quarters had been inadequate during the past year. "During this time a great deal of attention had been directed toward the procurement and organization of experimental equipment. The method of instruction in airplane engine design is similar to that of instruction followed in airplane design. There are two subjects in engine design which are supplemented as far as time permits by problems and reading assignments."

The discussion of subjects was opened by Dr. Stratton who asked if the Course should not deal more with fundamentals. He said he thought there should be some early specialization to provide a goal for the students; therefore, it is necessary to have some aeronautical subjects introduced early in the Course. "These minor subjects will keep the interest of the student alive. The fault of the average student is his natural laziness. The result is that he must be led to make a conscious effort."

Professor Warner added to Dr. Stratton's remarks by saying that lack of interest in certain subjects is oftentimes the mark of an unusually brilliant man. "Some of our best students have refused to interest themselves outside of their own specialty. The specialty must be used to demonstrate fundamentals." Dr. Hunsaker also held this view.

Mr. Crane agreed with Dr. Stratton that engineering education should be as general as possible, because specialization comes too soon anyway. "There should be just enough specialization to make a man see a definite purpose ahead. This encouragement, by showing a definite object, is necessary because ninety per cent of all students are followers and not leaders. The other ten per cent will lead if encouraged and the Course is inadequate if it does not supply this encouragement. Looking

back I find that principles remain the same but facts have changed. The facts of today are the fallacies of tomorrow, and for this reason students should be discouraged from their common habit of looking on a textbook as infallible."

Taking up specific subjects, Dr. Hunsaker asked if a study of the corrosion of metals should not be introduced in the study of design. Professor Chatfield said that there was already a course in materials of construction and considerable attention had also been paid to materials in a short course of airplane construction.

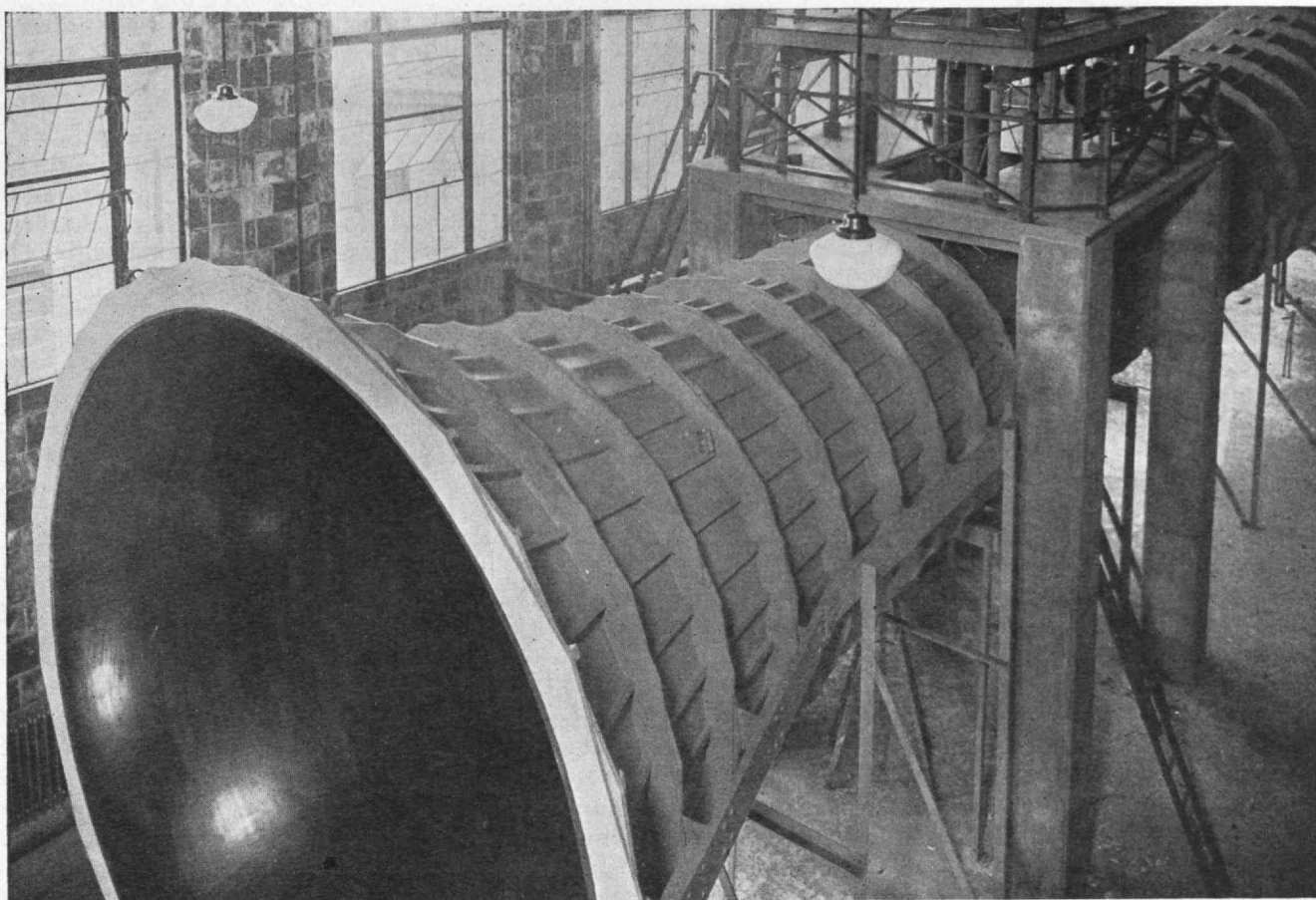
Mr. Cabot wanted to know if there was any subject at Technology at present specializing in fatigue of metals. He said that this was a very important question in aeronautics, as a great many of the failures of airplane engines are due to metal fatigue, especially in such parts as copper pipe lines. Dr. Stratton said that more attention might be paid to this subject, but that in the case mentioned by Mr. Cabot he thought it was a question of support of the pipes as much as it was a question of fatigue. In answer to a question asked by Mr. Huff as to whether teachers in the chemical department were instructed to adapt their subjects especially to students of aeronautics, Dr. Stratton answered that old courses were apt to crystallize about old phases of the subject, following too closely cut lines. "It is impossible to separate between physics and chemistry, and corrosion, for example, must be attacked by both sciences. It is impossible to create too many special subjects particularly adapted to a given group of students because of the expense which has to be distributed among a small number. We are continually faced with this problem since new phases of engineering are developing all the time."



Boston Evening Transcript

AT THE DEDICATION LUNCHEON

In the Front Row, Left to Right, Are: Rear Admiral Philip Andrews, U. S. N.; A. Lawrence Lowell; President Stratton; Harry M. Guggenheim; Professor Edward P. Warner, '17. Left to Right, in Back of the Front Row: Dr. George W. Lewis; Associate Professor Charles F. Taylor; Harry J. Carlson, '92; Kenneth M. Lane, '17; Lester D. Gardner, '98; Lieutenant Commander William K. Harrill, U. S. N.; Professor Charles H. Chatfield, '14; Gardner Fiske; Calvin W. Rice, '90; Major General J. F. Fecbet, U. S. A.; Colonel F. A. Deeds; Redfield Proctor, '02; Professor Harry M. Goodwin, '90; Professor Edward F. Miller, '86; John S. Lawrence; Everett Morss, '85; H. M. Crane, '95; and Dr. James H. Means, '06



Davis

WIND TUNNEL

The large wind tunnel as it appears in the new Daniel Guggenheim Aeronautical Laboratory

In continuing the discussion as to how general education at Technology ought to be, Mr. Hoyt felt that there was something to be said in favor of specialization. He thought that while generalization might train a man to be a good teacher of research, it would not necessarily make the Technology graduate of the greatest value to the industry. "A specialist makes his own economic value in the industry. A man's life is short and his time to learn is limited. It is a question of how much of his time ought to go to the study of fundamentals, as, for instance, the study of corrosion and fatigue of metals. It is impossible to make a good designer out of a fundamentalist." In answer to the point brought up by Mr. Hoyt, Professor Warner said that he thought that the two views were not irreconcilable. "A specialty can be used to demonstrate the universality of general problems. If aeronautical engineering is a case in point, we can use it to demonstrate generalities." Mr. Crane thought that we should start with generalities and specialize more and more. "The tendency at Technology is to specialize. The question is how soon in the Course this should take place." Dr. Stratton felt that we should develop graduates for two or three purposes. He did not think that we should try to develop a man along lines for which he is not fitted. According to Professor Chatfield, this classification is being carried out with the graduate students. He felt that in the future it will be possible to differentiate between the exceptional ten per cent and the rest of the students.

IV

The next point that came up for discussion was the development of individual thought in the student. Mr. Crane thought that in order to accomplish this end, a student ought to be forced to lay out his own problems and that he should not be provided with too definite specifications. He said no one should feel that education is an assemblage of facts, presuming, of course, that the student has had enough data on design to carry it on properly. Also he thought that the lecture system is bad, because it does not encourage individual thought. Professor Chatfield, referring to Mr. Crane's first suggestion, said that the design courses were laid out with the object of developing the student's initiative. "A certain number of specifications are provided for the design, but these are only to fill in a background which is lacking. These specifications are in the form of requirements rather than restrictions." According to Mr. Cabot, education should not only develop individual thought but it should teach a man to interpret correctly. He thought that much difficulty arose from incorrect interpretations, and he gave a particular illustration in which the cause of an airplane engine failure due to frost in the gas lines was misinterpreted and misunderstood.

A final point in connection with aeronautical subjects was brought up by Captain Aldrin, who felt that a change might be made in the method of teaching aeronautical subjects, and he asked how many subjects should be

carried along simultaneously in the third and fourth years. It was his opinion that ninety per cent of the students are crowded too much with miscellaneous subjects. He said that he had found it necessary to concentrate on definite subjects at any one time at the Engineering School at McCook Field. According to Professor Chatfield, the objection to carrying out Captain Aldrin's suggestion is that it would break up each term into seven or eight parts.

Dr. Stratton next brought up for discussion the power plant instruction at Technology. According to him the same principles already discussed should apply to power plant education. He said at the present time power plant instruction is associated with mechanical engineering and he thought that all power plant fundamentals might be kept together. The question raised by Dr. Stratton was as to whether the instruction in the mechanical engineering department provided satisfactory training for the airplane power plant engineer. Professor Taylor explained that at the present time the method of instruction in airplane engine design is similar to that followed in airplane design. There are two separate courses which are supplemented as far as time permits by problems and reading assignments.

Commenting on the success of the subject of aeronautical engines, he said that students had been lacking in preparation. "It is a difficult subject to teach because so few of the students know what they want. Naval students who are detailed to specialize in engines are an exception to this." On this subject, Admiral Cone and Professor Warner expressed different views. Admiral Cone felt that the aeronautical power plant engineer should receive his training in power plants first and Mr. Warner thought that the power plant specialist should take the undergraduate Course XVI and follow it up with two years graduate work, specializing in engine design. Mr. Litchfield felt that a distinction should be made between automotive engineering and central power plant engineering, and Professor Warner agreed. Dr. Hunsaker said there was such a thing as making the power plant training too broad. "We can't expect to start a man on Corliss engines and have him get religion in the last year." On the other hand, Mr. Hoyt and Mr. Crane felt that aeronautical engineering comes in a distinct field, and that the aeronautical power plant engineer must have a knowledge of head resistance and other things which are of little importance to the automobile engineer. At this point, Dr. Stratton called attention to the fact that there is a big demand for power plant engineers who are well grounded in physics and he asked if the fundamentals for the power plant designer are not the same as those for the designer of automobile engines. Professor Warner and Mr. Crane expressed the thought that the fundamentals are the same for both kinds of power plant engineering, and agreed with the idea already expressed by Mr. Litchfield. Mr. Crane said, "There is already a tendency away from the present type of aeronautical engine, as illustrated by the fuel injection engine being developed by the National Advisory Committee for Aeronautics. I know of designers of aeronautical engines who know nothing about Diesel engines. We must have an automotive course." This feeling that there should be an automotive course seemed

to be general among the members of the Committee, and Dr. Stratton asked the advice of the Committee as to the amount of physics and mathematics which should be taught in this automotive course, and whether those subjects should be carried through to the graduate year. Mr. Crane expressed the belief that there should not be too much mathematics. He said that mathematicians often became pests and that one can hire a man for \$100 a month who can do mathematics and nothing else. He thought such a man was dangerous.

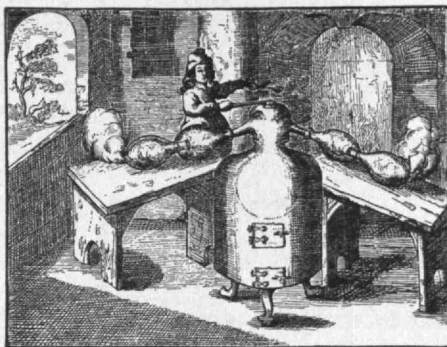
At the conclusion of the morning session of the conference, Admiral Cone referred to the position of Technology among the universities, and said that the other institutions were looking to Technology to supply the demand for mathematicians and physicists. In developing special ability, he thought it best to assign problems according to the qualifications of the individuals and to seek graduate students from other schools. Dr. Stratton agreed with Admiral Cone, and said that there had been a change in the policy of the Institute with regard to its choice of graduate students. It has been claimed that the Institute had gone to the other extreme in showing preference to its own graduates. Graduate students are selected on the basis of ability.

After lunch at the President's house, the members of the Committee gathered in the drawing room for a further discussion of the problems confronting the aeronautical Course, and particularly to discuss work for the aerodynamical laboratories at Technology.

In discussing the problems confronting the aeronautical industry with a view to outlining a research program for Technology, Mr. Huff spoke of the need for development of air screws. Mr. Hoyt emphasized the need for the development of light-weight materials and new methods of fabrication and Mr. Crane suggested investigating the possibilities of decreasing the weight of fuels in order to increase the useful load of aircraft. Dr. Stratton called attention to the possible development for aircraft of a light vapor engine using as a working fluid some liquid which would condense at room temperatures. Considerable time was given up to a discussion of the existing meteorological service which all agreed was unsatisfactory at the present time. Admiral Cone and Dr. Hunsaker said that the method of prediction should be changed entirely and a new method evolved based on a dynamic analysis. The new method should give detailed forecasts for localities and weather predictions four hours ahead.

The final subject brought up for discussion at the conference was instruction in air transport at Technology. Dr. Stratton said that this instruction would cover commercial uses of aircraft, including the economics of the subject. He thought that perhaps a coöperative course with the factories and transport companies might be arranged similar to the coöperative arrangement now existing in electrical engineering. Mr. Hunsaker felt that the planning of such a coöperative course would be very important. He doubted whether the present state of the development of the aircraft factories warranted such a course as yet.

Respectfully submitted,
WILLIAM G. BROWN, '16,
Secretary to the Committee



The Genesis of Industrial Chemistry

A Distinguished American Chemist, Recently Nominated President of the Society of Industrial Chemistry of Great Britain, Surveys the Chemical Industry, Past and Present.

The Substance of a Recent Aldred Lecture

By ARTHUR D. LITTLE, '85

CHEMICAL industry in any comprehensive sense is a development of the last one hundred years.

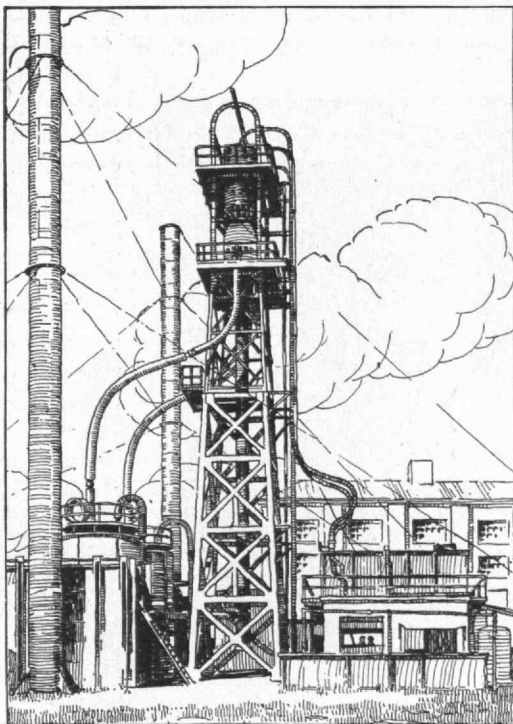
In ancient Egypt, Mesopotamia, Greece, and Rome it was represented by little more than a crude metallurgy, glass making, dyeing, tanning, lime burning, and the production of beer and wine. The lists that have come down to us of occupations in medieval Paris during the eleventh and thirteenth centuries are similarly restricted in their reference to activities of a chemical sort. Even as late as 1800 in England and on the Continent chemical industry in any general sense was practically non-existent, though there was a well developed metallurgy, much dyeing of a simple sort, some manufacture of gunpowder, and of course much brewing and tanning.

Chemical industry, as we now know it, may be said to have begun with the discovery, in 1791, by the French chemist, Le Blanc, of a process which permitted the cheap production of sodium carbonate and caustic soda from common salt. Sodium carbonate or soda has been known from the earliest times as a deposit, called "nitre" on the shores of the soda lakes of Egypt, but the chief source of alkali was the "barilla," prepared in Spain from the ashes of marine plants. The supply was, however, so inadequate that the French Academy, in 1775, offered a prize for the production of alkali from salt. This was won by Le Blanc in 1791. His factory was soon confiscated by the Committee of Public Safety. As a most deplorable consequence Le Blanc died by suicide in a French poorhouse.

The process was, however, taken up in England and became the foundation of the great British alkali industry with its many collateral products. Le Blanc utilized, as you know, sulphuric acid to decompose the salt. This acid, or oil of vitriol, had been known since the fifteenth century and is today the corner stone of the chemical industry. The chamber process for its manufacture had been operated in a small way in England since 1746, but now production rapidly expanded to meet the demands of the Le Blanc process.

Meanwhile, the great development of the cotton industry, made possible by the new textile machinery of Arkwright, Hargreaves, Crompton, and others, and stimulated by Watt's invention of the steam engine, created an intensified demand for alkali and acid and for improved bleaching agents. This demand was further augmented by the rapid growth of the paper industry, which resulted from the development, about 1800, by Robert and Fourdrinier, of the machine now everywhere in use for making paper in a continuous web.

The relation of the Le Blanc process to the art of bleaching developed in this way. For a long period down to the middle of the eighteenth century the Dutch had possessed a monopoly of the bleaching trade. The long series of operations involved kept the goods out of the merchants' hands for seven or eight months. The cloth was steeped in alkaline lye, washed, and spread on the grass for weeks, and this tedious procedure was repeated five or six times. It was followed by



steeping in sour milk, more washing, and renewed exposure to the sun before the desired degree of whiteness was obtained.

The first improvement in this long, standardized program was the substitution of dilute sulphuric acid for the sour milk. Like most innovations it met with much resistance, but one more radical was soon to follow. Chlorine had been discovered by Scheele in 1774 and its applicability to the art of bleaching demonstrated by Berthelot in 1785. A year later he brought his results to the attention of James Watt, who immediately introduced the method into England. The employment of chlorine as a gas under the conditions then existing involved many objectionable features and made slow progress until Charles Tennant, in 1799, brought out bleaching powder made by absorbing the gas in slaked lime.

Scheele had made chlorine by treating manganese dioxide with hydrochloric acid, and in the Le Blanc process torrents of this acid gas are produced through reaction of the sulphuric acid and the salt. The nuisance was so great as to become the subject of restrictive legislation, which forced the alkali makers to convert a stumbling block into a stepping-stone by utilizing their hydrochloric acid as a raw material for bleaching powder. This was done in an imperfect way at first, but later most efficiently by the classical Weldon process. Gradually other by-products were developed until the alkali industry was represented by huge plants in England, France, and Germany which supplied the world with the essential heavy chemicals.

In 1838 a process for making soda by passing carbonic acid gas into a solution of common salt in ammonia was patented in England by Dyar and Hemming, but not until 1872 were its serious engineering difficulties overcome by Ernest Solvay of Belgium and his improvements embodied in the Solvay process, which gradually supplanted that of Le Blanc. In 1851 Charles Watt took out

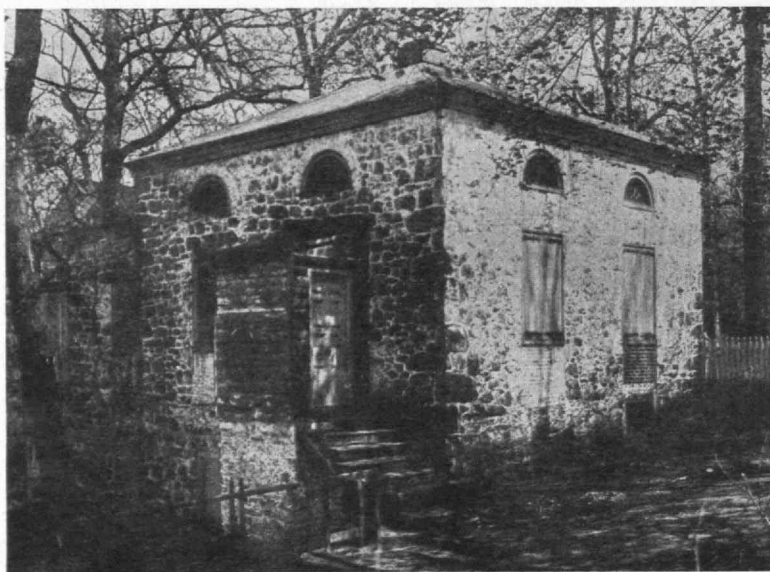
a remarkable British patent, in which the procedure necessary for the production of chlorine, hypochlorites, chlorates, and alkali by the electrolysis of a solution of salt was defined with a precision extraordinary for the time. Unfortunately, Watt's only source of current was

the expensive electric battery, and his disclosures were without commercial value and were soon forgotten. In 1890, however, Ernest A. LeSueur, '90, in the course of his thesis work as a student at Technology, developed the first commercially practical cell for the electrolytic production of chlorine and alkali from salt. A plant of his design was erected at Rumford Falls, Maine, and operated successfully for several years. Unfortunately, its management failed to recognize that they had entered a new field in which alternative processes were certain to develop, and where their lead could only be maintained through continued intensive research. The LeSueur

process was consequently soon supplanted by others which are now in operation on the great scale and in serious competition with the Solvay process by which no chlorine is produced.

The rough outline here presented of the development of the alkali industry is typical of chemical industry in general and serves to illustrate the factors upon which its growth depends. A specific chemical industry has its origin in a discovery in the laboratory. Its early development is commonly beset with difficulties. It grows through the reaction upon it of developments in other industries and through the conversion of its wastes into valuable by-products. It has no assurance of stability other than that furnished by continued research and the studied consideration of the trend of scientific progress and industrial development. When, however, competent technical ability is adequately backed by educated money and both made subject to wise business management, chemical enterprises have shown remarkable earning power and a capacity for growth of which the du Pont company in this country and the I. G. in Germany are the outstanding examples.

Through recent consolidations and agreements the Germans have now created that colossus of the chemical world known as the I. G., or, more exactly, the *Interessengemeinschaft Farbenindustrie Aktien-Gesellschaft*, the interests of which are now so varied that it reaches not only into every industrial section of Germany, but also into foreign countries. It controls large coal and lignite mining properties. It manufactures not only dyes, but chemicals of every kind, including fertilizers and explosives. It is interested in the manufacture of aluminum, artificial silk, and photographic supplies. It produces motion pictures, controls oil and sugar refineries, besides owning its banking, building, and real estate agencies. It owns from 50 to 100 per cent of sixty-six corporations in these and other fields, and 50 per cent or less of fifty other companies, a total



ON BRANDYWINE CREEK

First office building of the E. I. du Pont de Nemours Company, built in 1802

of 116. Among notable recent developments which it controls are the famous Bergius process for the liquefaction of coal and the still more famous and highly developed Haber process for the fixation of atmospheric nitrogen. Of the present production of 600,000 tons of nitrogen in Germany 440,000 were by the Haber-Bosch process of the I. G.

The development of chemical industry in America went forward more slowly than in Europe, but had already attained important dimensions along somewhat restricted lines when it was greatly stimulated by the war. We immediately found ourselves in need of the dyes and important organic chemicals for which we had depended upon Germany, and we were called upon to create vast works to meet the imperative and multitudinous demands of the military establishment and of our allies. Our manufacturers were, moreover, alert to capture markets formerly supplied by Germany while our people as a whole came to a realization that a strong and highly developed chemical industry is vitally essential to national security.

Among the multitude of companies that reacted to the stimulus of the war demand, none stands out more conspicuously than E. I. du Pont de Nemours and Company, Incorporated. It was, for that company, a wholly normal reaction in view of its origin and history. In 1800 E. I. du Pont came to this country from France with his father and brother. He had served under Lavoisier, the Father of Chemistry, in the French powder works at Essonne. Coming here with the intention of developing a great tract of land in Virginia, he was struck by the poor quality and high price of the American powder purchased for a day's hunting. He realized that an opportunity lay before him, purchased the necessary machinery in France, and in 1802 began building the first du Pont powder mills along the banks of Brandywine Creek, near Wilmington, Delaware.

Continuously thereafter the activities of the company have been closely identified with the history and progress of the United States. In our earlier days gunpowder was a vital necessity to the hunter and the pioneer, while in later times explosives of greater power have been equally essential to the quarryman, the miner, the farmer, and to engineering projects from the blowing up of Hell Gate Rock to the building of a railroad or the cutting of the Panama Canal. In 1921 the United States produced and used for industrial purposes 538,000,000 pounds of explosives, and we may assume that a great proportion of this was the

product of the du Pont company. In our war with Tripoli, as with Commodore Perry on Lake Erie and with General Scott in the Mexican War, it was du Pont powder that charged our guns, as it did again during the Civil War.

In 1863 the Swedish chemist, Alfred Nobel, prepared nitroglycerine by passing glycerine in a slow stream into mixed nitric and sulphuric acids. Being a liquid, it was inconvenient and dangerous to use. Nobel overcame these objections in 1866 by absorbing the nitroglycerine in *kieselgubbr*, a diatomaceous earth, for which later wood flour was substituted, and in 1878 he brought out blasting gelatine made by combining nitroglycerine and nitrocellulose. These inventions were quickly taken up and further developed by the du Pont company, as were the later smokeless powders and the high explosives such as T. N. T. The extraordinary extent to which the facilities of the company were expanded to meet the demands imposed upon them by the exigencies of the war is shown by the fact that whereas the annual capacity of its plants for military powder was 8,400,000 pounds in 1914, this capacity was increased during the

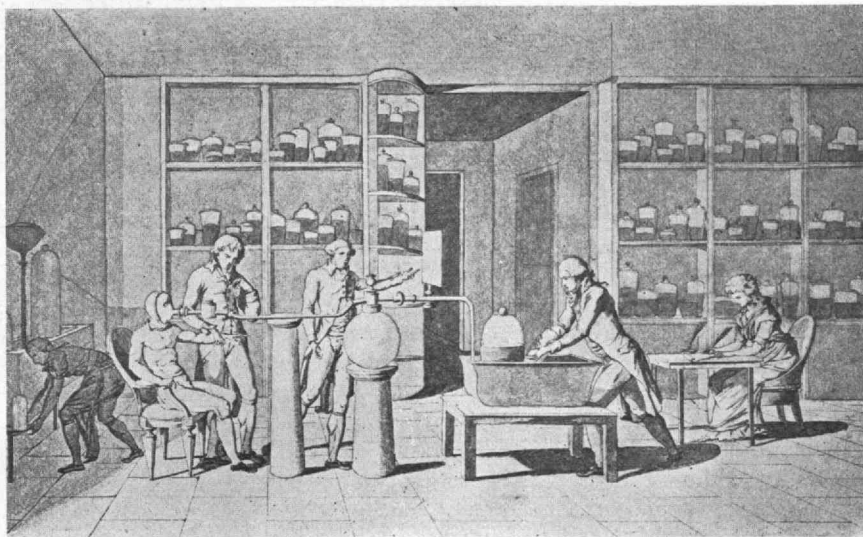
war to 440,000,000 pounds.

Nitrocellulose was first prepared by Schönbein in 1846, and few discoveries have had a more profound effect upon human history or more varied industrial applications. It led directly to collodion, photographic films, artificial silk; to celluloid, guncotton, and smokeless powder; to artificial leather and, most recently, to pyroxylin lacquers and varnishes of the type conspicuously represented by Duco, which are now finding general application as automobile finishes and as a substitute for paint and varnish for interior work and furniture. The production of these lacquers, which was less than



FOUNDER

*E. I. du Pont de Nemours,
President of the du Pont Com-
pany from 1802 to 1834*



AN EARLY EXPERIMENT

Lavoisier studying human respiration. From an old print



THE ALCHEMIST

one and one-half million gallons during the first half of 1924, had risen to more than ten million gallons in the first six months of 1926.

The du Ponts, early in the present century, very naturally turned their attention to the production of nitrocellulose products other than smokeless powder and first brought out a pyroxylin-coated fabric, which finds extensive use as artificial leather. The easy step from pyroxylin-coated to

rubber-coated fabrics was taken in 1916.

In 1917 they entered the broad field of pyroxylin plastics in competition with celluloid. They proceeded to the manufacture of motion picture films in 1923 and to the production of the Duco finishes a few months later. In 1920 they began the manufacture of artificial silk from another cellulose compound known as viscose, to which I shall refer again. In 1923 the experience gained with viscose was further utilized in the production of cellophane, a form of cellulose in excessively thin, transparent sheets, which are principally used in wrapping packaged articles of luxury.

Previously, in 1917, there had been acquired by the du Ponts the accumulated facilities of a large corporation which, for more than one hundred years, had been developing the manufacture of paints, pigments, and an extensive line of chemicals. Other plants for the production by high pressure processes of synthetic ammonia and the solvent methanol have recently been erected.

I have endeavored in this inadequate review of the growth of the du Pont company to indicate the manner in which the logical interests of an enterprise originally concerned only with the manufacture of black powder led it progressively to undertake the production of smokeless powder, nitroglycerine, dynamite, and high explosives, and to proceed to its present widely diversified output of chemically related products. In this development the company has employed at one time as many as 1,200 chemists and spent in a single year three million dollars in research.

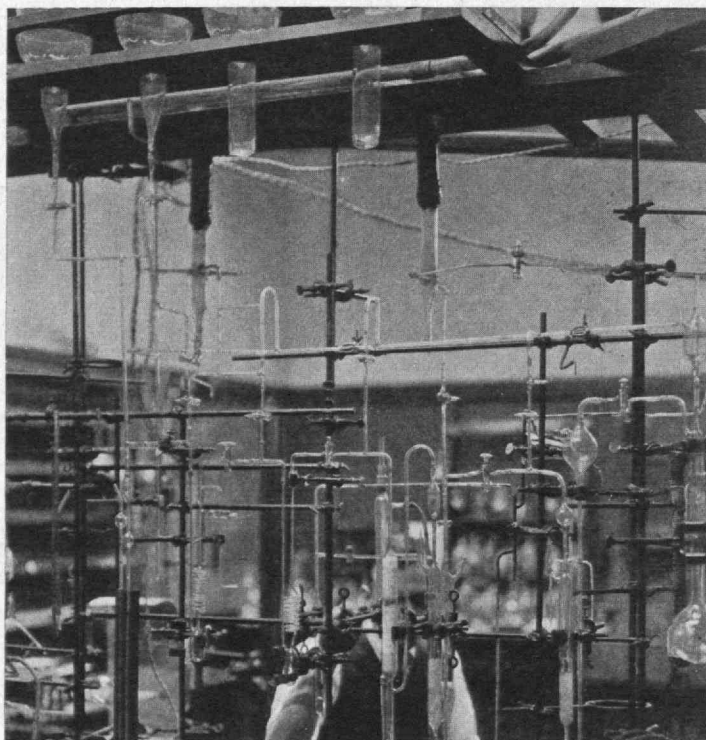
It is evident from certain definite trends that chemical industry is developing a new technology, in which the chemical engineer is destined to play an increasingly important part. Conspicuous among these trends is that toward synthetic processes involving the use of extremely high pressures, and in which the materials concerned are

often at the same time subjected to high temperatures. For example, in the recent processes for the fixation of atmospheric nitrogen in the form of ammonia, the nitrogen and hydrogen are delivered to the catalyst at pressures of 1,500 to 15,000 pounds and at temperatures which sometimes exceed 900° F.

High pressures are similarly employed at the other end of the thermometric scale in the numerous processes now concerned with the liquefaction of gases. Liquid chlorine, which nearly cost Faraday an eye, is now shipped about the country in tank cars. Propane and butane, recovered from natural gas, and sulphurous acid gas are similarly shipped in liquid form. Much higher pressures, and temperatures approaching the absolute zero, are employed in the liquefaction of air and the separation therefrom of nitrogen for the synthetic ammonia processes, argon for incandescent lamps, and neon for the flaming tubes which are bringing a new and lurid radiance to advertising.

The same procedure holds forth much promise of cheap oxygen in the near future. The high temperatures obtainable through its use with fuel should permit oxygen to invade, within a few years, the electric-furnace field, thus extending high-temperature metallurgy and facilitating the production on the large scale of super-refractories, high fusion-point glasses, and even of fused quartz.

Since a water-gas set can be operated continuously with a mixture of steam and oxygen, cheap oxygen should introduce such economies in gas manufacture as will result in the rapid broadening of the field of gas utilization both in house heating and in small industrial furnaces and boilers. Just as the electric central station has eliminated many small power plants, so the gas control station will probably more and more replace with



THE CHEMIST

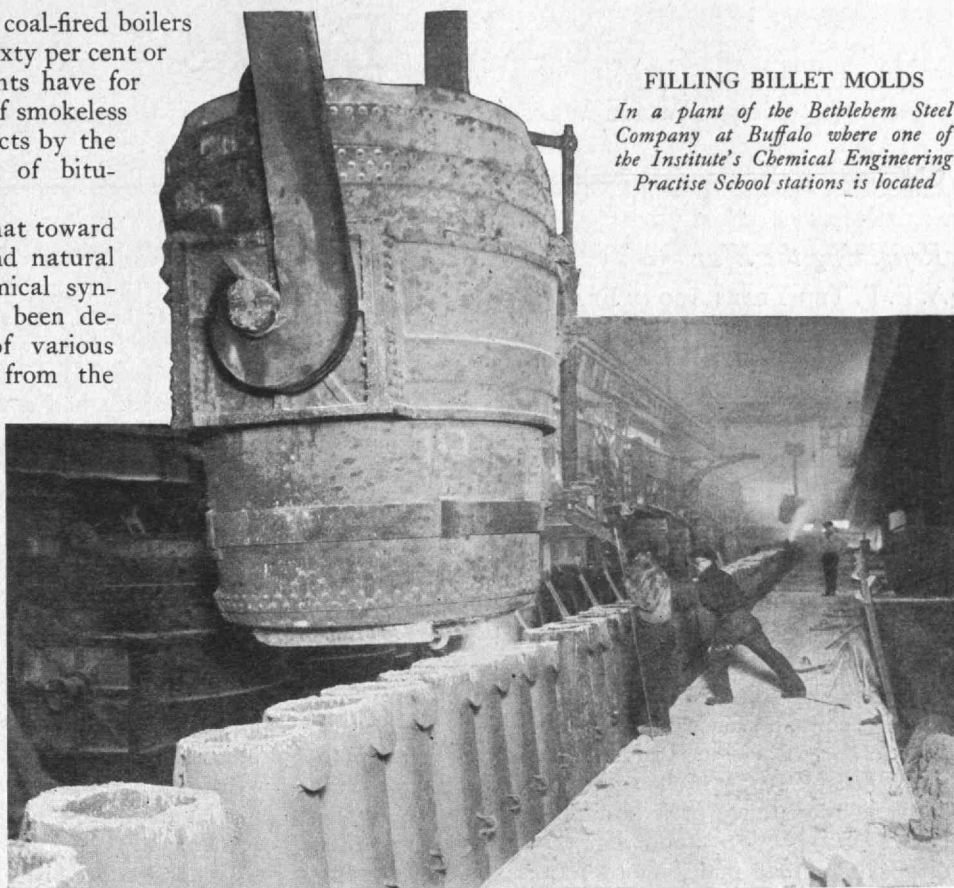
high efficiency gas boilers, small coal-fired boilers now operating at efficiencies of sixty per cent or less. Many of these developments have for their objective the production of smokeless fuel and new values in by-products by the low-temperature carbonization of bituminous coal.

Another important trend is that toward the utilization of petroleum and natural gas as raw materials for chemical syntheses. Already have processes been developed for the production of various alcohols and solvent acetates from the same material by methods of oxidation, which also yields numerous other organic products. It seems altogether probable that we shall presently have a chemical industry based on petroleum and comparable in its importance to that developed from coal tar.

Of somewhat similar character and significance are the new synthetic processes for the preparation from water gas of methanol and other alcohols on the one hand, and of the whole series of paraffin hydrocarbons from methane to solid paraffin on the other. The ultimate effect of these and similar processes may be to involve the gas companies in a new chemical industry. The intimate contacts and vast surface exposure induced by high-speed stirring have been found to facilitate many chemical reactions to a remarkable degree. The experimental results obtained with stirrers running at 30,000 r.p.m. seem to foreshadow new types of processes and equipment.

Still another definite trend is toward processes employing ultra-violet light and other forms of radiation to promote reactions not otherwise easily induced. We are just beginning to appreciate the profound effect of radiant energy in promoting chemical change, and the new Coolidge tube, which operates at 900,000 volts, should greatly extend our knowledge in this promising field.

There is also a marked tendency toward the broader utilization of bio-



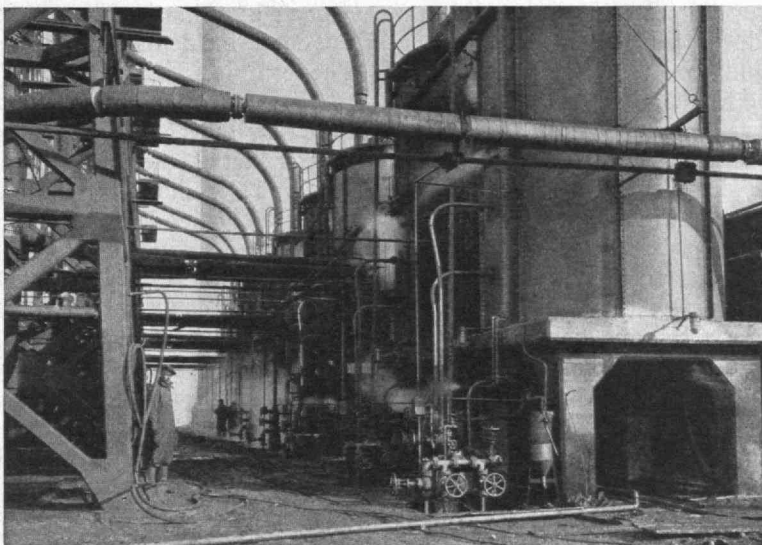
FILLING BILLET MOLDS

In a plant of the Bethlehem Steel Company at Buffalo where one of the Institute's Chemical Engineering Practise School stations is located

chemical processes in the production of organic compounds. A notable example of this is the very successful application of bacterial action in the fermentation of corn to butyl alcohol and acetone. Ordinary yeast is rich in vitamins and in proteins of high dietetic value that will eventually give it consideration as an ultimate source of staple food products.

Chemistry, through research, has drawn healing and beauty from coal tar; ensured our food supply by producing nitrates and ammonia from the air; provided

new metals and endowed with properties of greater usefulness the metals previously known. In these and countless other ways it has contributed to our well-being, opened the horizon of our minds and enriched and prolonged our lives. It has developed great industries which are peculiarly its own, but chemistry pervades all industry. Chemistry is a creative science, and the first chapter of the Book of Genesis is not yet written.



CRACKING GASOLINE

A Dubbs process plant in Wyoming

Books

World War • • Descent of Man • • Impending Elections

Refighting the War

A. E. F. TEN YEARS AGO IN FRANCE, by Major General Hunter Liggett. \$3.00. 335 pages. New York: *Dodd, Mead and Company*.

SOME MEMORIES OF A SOLDIER, by Major General Hugh Lenox Scott. \$5.00. 400 pages. New York: *The Century Company*.

THE A. E. F. IN BATTLE, by Dale Van Every. \$3.00. 385 pages. New York: *D. Appleton and Company*.

PROFESSIONAL historians are wont to assert that the truth about events does not emerge for at least a century — a view which invariably meets with skepticism from the layman. "What!", he exclaims, "How can people a hundred years away know more about events than I do who have lived through them?" There is common sense on both sides — and there is also a little specious logic. It is assuredly true — as historians insist — that their successors, standing at the convenient distance of a hundred years, will enjoy a better "perspective"; and that they will have at their disposal a great many more sources and documents than the contemporary writer; for people have a way of bluntly asserting in their memoirs a good many things that they hesitate to admit while they are alive.

On the other hand, no perusal of documents, however extensive and painstaking, can ever replace the "feel" of events that the alert contemporary gets. The mass hysteria of the World War, for example, will one day seem as incredible as the essentially similar hysteria of the Crusades; and no mere documents will ever make it completely understandable. One must have lived through that madness to comprehend it. Moreover — for the chastening of an overweening scholarship — let us remember that if the eyewitnesses of events did not write, there would be no documents for future historians to mull over, criticize, and compare; and the boasted advantages of perspective would wholly vanish.

This, then, is the chief value of such books as General Liggett's "A. E. F." and General Scott's "Some Memories of a Soldier." They are absorbing books in their own right because they are the stories of men who lived through the same world-shaking events as the rest of us, though in a vastly better position to know what was really happening. Tomorrow they will have permanent value for the historian who is looking for first-hand material describing things that happened before he himself was born.

Of a somewhat different sort is "The A. E. F. in Battle" by Dale Van Every. Here is a bold author who is already tackling posterity's problem. Here is a book which endeavors after a brief ten years to achieve such perspective as is possible, and to construct out of the mass of orders, maps, and personal narratives already available, a single story of America's share in the battles

of the World War. Though such a book can scarcely aspire to the permanent value of the other two, and though it lacks the vivid personal touch of a single combatant's own story, it does fill a very definite and genuine need. After all, a World War *did* happen and in it America had a very considerable share. It is all very well for scientific historians augustly to bid us wait for the final truth; but we shall not be here a hundred years hence to enjoy that ultimate revelation. And meantime, each of us would very much like to know what relation his particular shell-hole bore to the grand strategy of the gentlemen who wore stars on their shoulders. Mr. Van Every tells precisely that. Except for some needlessly confusing maps, "The A. E. F. in Battle" is very nearly a model of what such a book should be, telling its story simply, clearly, effectively — and with an agreeable freedom from the boasting and bluster which the war years made so painfully familiar. Without relying on anecdotes to brighten his narrative, Mr. Van Every nevertheless gives every page the breathless interest of something personally experienced.

General Scott's book, on the other hand, is composed exclusively of personal experiences. Unfortunate because of his age in being denied command on the Western Front, General Scott has some important observations to make on his mission to Russia; and his much-heralded explanation of the refusal to permit Roosevelt to raise a division likewise contributes needed information about a sorely controversial matter. The book does not deal exclusively with the World War, however. It is the story of the author's whole life, including his pacific achievements among the Indians and pre-war difficulties on the Mexican border.

General Liggett's book and Mr. Van Every's make a good combination because they frequently describe the same incidents from slightly different viewpoints. The result is a kind of literary binocular vision — seeing through two eyes instead of one. Both, for example, tell the story of the Lost Battalion — General Liggett in greater detail than Mr. Van Every, who is chiefly concerned to show its relation to the whole offensive. General Liggett adds a few intimate details about the efforts at headquarters to rescue the six "lost" companies out there in front: "During this time I spent every hour I could at General Alexander's division headquarters in the forest, trying, with him, to devise a means of relief. The enemy naturally knew that we would make desperate efforts to do this, and though we tried pressure everywhere, to right and left, day and night, the enemy balked us." Both authors explain that the battalion was never really lost: everybody knew where it was — like the famous teakettle at the bottom of the sea!

The two disagree as to the causes of the confusion
(Continued on page 524)

News from the Classes

The Secretary of 1893

A SCRUTINY of the careers of many Class Secretaries has revealed few that match that of Frederic H. Fay. *Technique 1894* lists him as a member of the class executive committee his senior year, the year that Albert F. Bemis was Class President. As an official he does not appear again in any class record until 1897, the year the "First Catalogue of the Class of '93" was published under his editorship as the Secretary of the Class. This publication indicates that he was elected to the Secretaryship in 1896, an election that seemingly was for life, for he has occupied the office ever since. Volume I, Number 1 of *The Review*, founded, as is well known, by the Association of Class Secretaries of which Mr. Fay was the first Assistant Secretary, carried 1893 notes that read prophetically like the concise, informative ones he has contributed to this issue, the 178th *Review* that has appeared since he first set about his duties. Of the seven other secretaries whose careers the present Volume has brought to light, none save Richard A. Hale, '77, have more service stripes than Mr. Fay. He tops both Isaac W. Litchfield, '85, and Charles E. Locke, '96, those stalwarts.

There is abundant evidence of the significant work that has been done during these years of service. Six class catalogues have been published to date, totaling nearly 900 pages. The latest of these, issued at the time of the Thirtieth Reunion, runs to 335 pages, a handsome volume, well printed and fully illustrated. Certainly 1893 and Mr. Secretary Fay have hung a star in the class firmament for others to hitch their wagons to. Only one other achievement need be mentioned, and that is the '93 Dormitory, the first one to be given by a class.

A complete idea of Mr. Fay's secretarial activities may not be gained by examining his 1893 work alone, as was hinted above in referring to the Association of Class

Secretaries. Launched on November 4, 1896, at the old Boston Technology Club, "to promote class spirit and the welfare of the Institute, and to systematize all matter pertaining to class organization and record," the Association elected as its first officers Walter B. Snow, Secretary, and Mr. Fay as Assistant



FREDERIC H. FAY, '93

Secretary of the Association of Class Secretaries and Secretary of his Class. A Kanograph portrait

Secretary. In 1902 Mr. Snow resigned and Mr. Fay succeeded him. Here again he has set up a record of continuous service; he is the Association's Secretary today.

And there is more. From 1898 to 1900 he was a member of the Executive Committee of the Alumni Association; in 1902 Vice-President of the Association; from 1911 to 1913, a member of the Institute's instructing staff in the Department of Civil Engineering; in 1913, President of the Alumni Association; and from 1914 to 1919 a Term Member of the Corporation. By this time, having run the whole gamut, he had earned a rest from alumni affairs, and took it, except, of course, in his secretarial capacities.

This work Mr. Fay has done concomitantly with accomplishing notable things as a consulting engineer — as a member of the all-Technology firm of Fay, Spofford and Thorndike. These achievements must go unrecorded here; they can be found in part in "Who's Who" and similar containers of such information. The *Review* contents itself in simply calling attention to his far-reaching work in behalf of his Class, the Alumni Association, and Institute.

Closing the Books

Since this is the last number of *The Review* before Volume XXXI starts its career next November, it is timely to survey the work of the Class Secretaries during Volume XXX as indicated by their contributions to this section. The following classes have appeared in every issue in which they were scheduled to have notes: 1875, 1881, 1888, 1889, 1890, 1891, 1892, 1894, 1896, 1897, 1898, 1899, 1901, 1902, 1903, 1905, 1906, 1907, 1909, 1911, 1912, 1914, 1917, 1918, 1923, 1925, 1926, and 1927. These twenty-eight classes out of a total of fifty-nine are hereby inscribed upon the roll of honor. Needless to say there are other secretaries who have done yeoman work and the fact that they missed an issue or so should not subtract from the applause due their faithfulness.

Nearly 50,000 words of class notes are included in this issue. About the same number were printed last November — a huge collection, as will be remembered — and in that issue, 1028 names were mentioned one or more times. This will indicate the amazing amount of personal news that the Secretaries turn in for *The Review* to publish. We know of no other magazine of any sort that approaches this volume of news about so many different persons. (See *The Tabular View*, page 461.)

In the eight issues of this closing volume, ninety-three deaths have been recorded. Against this has

appeared news of ninety-one births. It should be pointed out that deaths are more likely to be reported than births.

The Grab Bag

William E. Nickerson, '76, who endowed the new Chair of Humanics, has suddenly become a bone of contention between the Classes of 1874 and 1876. It is hardly expected that the conflict will be as sanguinary and verbose as that now raging between 1921 and 1922. — Machine politics have finally triumphed in the 1884 body politic. — The Secretary of 1885 reveals the secret of A. D. Little's success; he is a Sanskrit expert as well as a machine candidate.

Granger Whitney writes to the 1887 Secretary of a remarkable amanuensis discovered by him in the West Indies. — The 1890 contribution contains mention of an unusual number of notables. — Frederic H. Fay, '93, does an excellent job of advance reporting and includes a delicate aquarelle by Harold Mead Mott-Smith which should appropriately be entitled "Eternal Youth."

The Class celebrating its Thirtieth Reunion records that one of its members' grandsons is entering college this fall. — Almost incredible is the adventure of George Priest, '99, with an infuriated blue jay armed with a knife. — A eulogy written by a Japanese associate of the late Matthew Brodie is quoted by the 1902 Secretaries. — The Mexican or Spanish sent in by Roswell Davis, '05, is suspect. It may be poetry.

Three delegates to the National Political Conventions are reported: Louis S. Cates, '02, (Republican); Carl Trauerman, '07, (Democratic); and Thomas C. Desmond, '09, (Republican). The latter as head of the New York Young Republican Club recently has been raising a hulabaloo over the failure of woman suffrage and by his advocacy of Dawes' for the Republican nomination. His Dawes speech was greeted with loud cheers for Hoover.

In ways other than national is 1909 politically successful. In three years they have furnished two presidents for the Technology Clubs

Associated — Mr. Desmond and Maurice R. Scharff. — The controversy over the office of New York State Architect referred to in this column last month has been settled by the appointment of William E. Haugaard, '10, to the position. It was formerly filled by Sullivan W. Jones, '00. — The Review Editors are anxious to know what would happen if twelve men showed up for the 1911 dinner in Boston.

From 1915 comes an interesting paragraph or two from Madrid, together with news from Russia. — We are almost willing to print "1916 Redivivus" in thirty-six point type with red ink across this page when that class submits notes once more. — It was remarked in The Review office that the 1919 and 1920 Notes have a high ratio of information to wordage. — Dugald C. Jackson, Jr., '21, claims the honor of having coined *Asec. Suum cuique!* The 1921 counter-offensive against 1922 gets underway in this issue. — The 1923 Secretary presents a letter from Melbourne, Australia, that reveals the zenith of a Harvardonian career.

Twenty-six births are reported. Five are in 1918 and in 1921; three in 1920, and 1925; two each in 1911, 1914, 1924, and 1926; and one each in 1922 and 1927. The three in 1925 includes one pair of twins.

Deaths

Further mention of the majority of the following men, recently deceased, may be found in the notes of their respective classes:

WILLIAM T. BLUNT, '74. Died March 3.

CHARLES P. HOWARD, '74. Died March 6.

HERBERT B. PERKINS, '74. Died March 1.

WILLIAM L. D. TWOMBLY, '74. Died February 21.

EDWIN C. WOODWARD, '77. Died January 4. Believed to be the oldest assayer in the United States, he was also inventor of an assay furnace and a "button balance" now in general use.

W. F. M. GOSS, '79. Died March 23. One time Dean of the School of Engineering at Purdue University, and later at the University of Illinois. From 1917 to 1925 he was President of the Railway Car Manufacturers

Association, and in 1914 of the American Society of Mechanical Engineers.

MRS. EVELYN WALTON ORDWAY, '81. Died March 9. She was Professor of Chemistry at Newcomb College of Tulane University, New Orleans, until 1905 when she retired from her profession.

DONALD MACRAE, '85. No date of his death given. He held an important place in the business and civic affairs of Wilmington, N. C.

EDWARD A. JONES, '87. Died February 29.

WILLIAM S. DAVENPORT, '89. Died April 3.

HENRY W. KERN, '90. Died March 4, while on a trip with Mrs. Kern to the West Indies.

HUGH B. CLEMENT, '91. Died October 16, 1927.

HARRY R. CALLENDER, '93. Died April 8. Prominent in business and civic affairs of Los Angeles, at the time of his death he was senior partner of Callender-Manwaring Company of that city, specializing in industrial insurance.

GEORGE A. COWING, '01. Died March 13. He was Director and Treasurer of the Harkness and Cowing Company in Cincinnati, Ohio.

FREDERIC R. C. BOYD, '01. Died in May.

MATTHEW BRODIE, '02. Died March 25. At the time of his death he was representing the Sullivan Machinery Company in Tokyo, Japan.

HOWARD M. COWPER, '05. Died February 28. He was associated with the Hydro Construction Company in Buffalo, N. Y.

HERMAN W. LACKMAN, '05. Died March 4. President of the Gibson Realty Company in Cincinnati, Ohio.

VERNON S. ROOD, '07. Died May 1. In Bingham Canyon, Utah, he was manager of the Utah Apex Mining Company.

EDGARTON G. POLLEY, '17. Died January 22.

GEORGE R. MARTIN, '18. Died May 22.

JOHN L. HOSCH, '25. No date of his death given. In the Department of Commerce, Washington, D. C., he had charge of stress analysis work and the licensing of pilots.

FREDERICK N. CHEEVER, '25. Died February 19.

'74 The Class of '74 has recently been honored through our distinguished member, Nickerson, who has originated and endowed the new chair of "Humanics," just started at the Institute. At the 133d meeting and dinner of the Alumni Council, on April 30, Nickerson delivered a most interesting address, telling of his work on this subject. The discussion by members of the Council which followed showed that the new department will find a place in technical education which is greatly needed, and every speaker was lavish in complimenting the author. The Secretary, who was an invited guest, took occasion to call attention to the fact that Nickerson is primarily a '74 man, having passed the four student years with the Class, although he was not graduated till '76.

We are pained to announce the recent death of four of our good men, Blunt, Perkins, Howard, and Twombly, who passed away early in March. — CHARLES F. READ, *Secretary*, Old State House, Boston, Mass.

'75 The Review Editors announce with regret that no notes have been received for this issue (the first number scheduled he has missed in the present volume) from Secretary Henry L. J. Warren. While on the way late in May to spend the summer with friends in the Puget Sound region, Mr. Warren met with an accident in Chicago. Details are unavailable, but it is understood that he slipped in getting off of a train, was severely shaken, and was cut in the face and head, and was taken to the Illinois Central Hospital. By the time this issue is in circulation he expects to be convalescing at 5842 Stony Island Avenue, Care of Herbert Fairfield, Chicago, Ill.

'77 The Fifty-First Annual Reunion of the Class of '77 was held at Brae Burn Country Club, West Newton, on Thursday, May 31. Members of the Class were invited to attend as guests of the President, Charles A. Clarke. Before lunch was served there was golf for those who desired it.

It is urged that all members who have not done so should join the Alumni Association. Blanks will be furnished by the Secretary of '77 on application. The Association has need of a larger membership and support by payment of dues, and all non-graduates are eligible to membership. The Technology Review is sent to all members who pay dues. Please lend your hearty support. The Athletic Association of the Institute has been doing most excellent work through the leadership of Dr. Allan Winter Rowe, or, and the prominence in which Technology has progressed in the rowing world is worthy of special note. The Class of '77 has contributed the sum of \$50 yearly for the past years in common with other classes, and the amount is fully appreciated by the athletic committee. The Secretary would ask that a contribution of \$2 be made by each member towards the fund and the general treasury of the Class.

The Secretary regrets to announce the death of the following members of the Class of '77 during the past years: George J. Baldwin on March 3, 1927; George H. Hewitt on April 11, 1926; Charles B. Wheelock in De-

cember, 1927; J. A. Wilson in April 1927; and Edwin C. Woodward on January 4, 1928.

E. C. Woodward died at Colorado Springs on January 4. He was in the mining laboratory at Technology taking a special course during 1876-77. The following sketch of his life is taken from the local paper at Colorado Springs:

"E. C. Woodward, 78, pioneer mining man and believed to have been the oldest active assayer in the United States, died at his home at 1718 North Nevada Avenue after an illness of only four days. Death came directly from a severe attack of pneumonia. Mr. Woodward was a master craftsman in his profession and he was widely known among mining men to whom his word was law in all matters of assay. He attained national prominence through his invention of an assay furnace, and a 'button balance,' now generally used. Born in 1850 at Damariscotta, Maine, he later attended Bowdoin College from which he was graduated in 1870, and Technology in 1872. He went to Leadville as assayer for the American Smelter where he took an active part in the gold rushes. Later he went to the Cripple Creek district, and in 1893 established an assay office at Altman, where he was located during the famous Bull Hill war. In 1895 he permanently established himself in Colorado Springs where he worked on assays in the furnace of his own invention. He is survived by his wife, a daughter, Mrs. Elizabeth MacWilliams, and a son, Dr. Harry Woodward, a well-known Colorado Springs physician." — RICHARD A. HALE, *Secretary*, Essex Company, Lawrence, Mass.

'81 One of the few graduates left and one who was always prominent at the Institute and thereafter, died on March 9. I refer to Evelyn Walton, who afterwards married Professor Ordway, and was then known as Mrs. Evelyn Walton-Ordway. After graduation Miss Walton became an assistant at the Institute and was married to Professor Ordway in 1883. She accompanied him to New Orleans, where she was made Professor of Chemistry and Physics at Newcomb College of Tulane University until 1924. She was then made Professor of Chemistry, which position she held until 1905 (Physics having been made a separate department). She gave up teaching in 1905 and on the death of Professor Ordway on July 4, 1909, she returned to New England and lived at Saugus, and more recently at Lynn. She was one of the ablest graduates which the Class of 1881 had, and was always interested in the affairs of the Class and of the Institute. She was a regular attendant at all alumni and class dinners although she was the only co-ed graduate of our Class. There are now thirteen living graduates out of a total of twenty-seven.

Ed Warren writes that he had printed a report on "The Beaver in Yellowstone National Park." For some reason or other the Post Office Department held up the distribution, refusing to take it as second class matter, but he has forwarded some copies by express. He further writes that Howard Barnes and he were in high school together. "We're growing old." Warren writes that he has a grand-nephew in the freshman class at Technology, Arthur H. Eaton, Jr. He is a

crack on the beaver. He writes: "I spent the summer in Colorado Springs, except for a month, July, traveling and camping in Gunnison County, mostly about Crested Butte, where I used to live in the days of my youth, at least when I was younger. I had as a companion a Colorado College student, and spent much time in studying the beaver work in that region, and there is lots of it, the animals having increased much with a continual close season. Beavers are my hobby these days, and most of my time is given to their study. There are plenty not so very far from here, so that I am not at a loss for material." — FRANK H. BRIGGS, *Secretary*, 390 Commonwealth Avenue, Boston, Mass.

'82 Before this note goes to press the Class undoubtedly will have celebrated its Forty-Sixth Reunion in accordance with plans already perfected for a gathering with the ladies at the Mayflower Inn, Manomet Point, Plymouth, Mass., on Friday, June 29. At this writing an attendance of somewhat over twenty is anticipated. Mr. and Mrs. Arthur W. Walker and Mr. and Mrs. John H. Ross are abroad, but their return is expected before the date of the Reunion. — WALTER B. SNOW, *Secretary*, Statler Building, Boston, Mass. RUFUS F. HERRICK, *Assistant Secretary*, 24 Milk Street, Boston, Mass.

'83 Dave Wesson, of 111 South Mountain Avenue, Montclair, N. J., invited the Class and all its impedimenta, viz., harems, asylums, and catacombs to visit with him on June 9, 10 and 11, first at Montclair, and then at his summer place near Mantoloking, N. J., bathing suits, golf balls and pure spring water, free gratis for nothing. Food was procurable from nearby groceries and his herd of goats. He expected to add to the latter from the Class. — HARVEY S. CHASE, *Secretary*, Box 987, St. Petersburg, Fla.

'84 Bardwell, after various interesting travels, is settled as Professor of Chemistry at Carleton College, Northfield, Minn. — *Science* for May 4 refers to the laying of the cornerstone of du Pont Hall at Hampton Institute. The building is the gift of Senator Coleman du Pont of Delaware, who gave \$250,000 with the provision that the hall of science should be erected with part of the fund, and other sums be retained for maintenance.

Purinton has been chairman of the local committee for the Technology Clubs Associated at Atlantic City. — Bartlett writes that he is thinking of attending for the second time the summer school of French at Middlebury, Vt., this summer. Since retiring a few years ago he has lived a good deal in and about Paris, renewing his early more or less successful assaults on the French language. He chanced to meet du Pont in Paris for the first time in forty-one years.

The referendum ballot for Class Secretary has resulted in the choice of the machine candidate, Gill, who will, it is expected, take office and the custody of the Class deficit at the annual dinner, June 4. As soon as prac-

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ticable, thereafter, the present Secretary will, as usual, leave for Europe, with the expectation of attending the International Congress of Historians at Oslo in August and that of the Mathematicians at Bologna in early September. Gill has also consented to represent the Class in the Alumni Council. — HARRY W. TYLER, *Secretary*, Room 2-261, M. I. T., Cambridge, Mass.

'85 On a Wednesday evening in the month of May, the twenty-third to be exact, the Class assembled to congratulate President Little on the distinguished honor that has been conferred upon him by the Society of Chemical Industry of Great Britain. Arthur did not know it was in his honor, for some of his class notices had been censored, so he started in to preside as only a habitual president can, until somehow the meeting got away from him and he became a bewildered passenger on the front seat with the entire Class pulling the rope of his triumphal car. On several easels back of the diners were enlargements of class photographs in which he appeared, intended to represent him successively as ex-President of the American Chemical Society, ex-President of the American Institute of Chemical Engineers, Vice-Chairman of the Engineering Foundation Board, life member of Corporation, and Sanskrit expert for Harvard University. In some of these he appeared in costume, in others not, but in either case there was an air of quiet dignity fully in keeping with that which pervaded the dinner. Early in the program bouquets were sent to Mrs. Little's mother, Mrs. Nathan Anthony, who was made an honorary member of the Class on her eighty-fifth birthday, and also to Mrs. Little herself. At this point also the Brown progeny, embracing several pages of the directory, sent a handsome bouquet to Arthur, with the request that he acknowledge it to the individuals. As the message of the Brown tribe was read, there were loud calls for the author to which Charles modestly responded, visibly shaking with emotion.

To be sure there were some happy pleasantries, until Dr. Little called on Dr. Norris to outline some of the changes that were taking place at Technology. That is where a cog slipped. Norris proceeded to tell the Class of the high place its President occupied in the chemical world. At times he was Dr. Norris and then again he was "Sunny Jim," but the job was properly and handsomely done. Ev Morss then told us about the financial condition of the Institute of which he is Treasurer, after which the Secretary went over the class roll and told as much as he could of the absent members, improvising where authentic material failed. Henry Sweet was confined to his home by illness, but he sent word that the Class was invited to his Dover farm for a day of golf and relaxation during June. A committee was appointed to wait on Henry and set the date.

One of the members suggested that the nominations for class officers had heretofore smacked of political influence and graft and moved to do away with the nominating committee, each man to write the name of his personal choice. In order to show the popularity of our young hero, there were sixteen members present and when Charlie Brown

counted the votes, every mother's son of them had voted for Arthur! At least that's what Charlie said.

Early in the evening each member of the Class talked with Lyman Sise over the telephone. Lyman hasn't been able to meet with us for a year. Those present were: Baker, Bedlow, Brown, Dewson, Frazer, F. M. Kimball, Litchfield, Little, Morss, Osgood, Pierce, Plaisted, Pratt, Schubmehl, Hildreth, and Wallace.

A long letter from Cuyler Greene tells of his doings and states that he is Treasurer of the Detroit Technology Association. — John Lyman says he can't come on for just one meal with the gang, but put on a three-day reunion at Wianno and it will not be necessary to ask whether he is coming or not.

The passing of Don MacRae has been told in a class letter, but few of us realized the important place he had in the business and civic affairs of Wilmington, N. C., his home. A clipping from a Wilmington paper says: "Educated at Bingham's school, Mebane, N. C., and the Massachusetts Institute of Technology, he entered business in Wilmington and was for many years connected with important enterprises here and elsewhere. Previous to his retirement from active business he was closely identified with a number of important interests. Principal positions held by him were Treasurer of the Navassa Guano Company; Vice-President of the Wilmington Cotton Mills; member of the board of directors of the Atlantic Coast Line Railroad Company; director of the Wilmington Savings and Trust Company; director of the Carolina Insurance Company; director of the Linville Improvement Company, and was British vice-consul at Wilmington as his father was before him.

"At the outbreak of the Spanish War, Mr. MacRae, a captain in the Wilmington Light Infantry, had just been married and was starting for Europe on his wedding trip. He immediately cancelled all plans, however, and devoted his entire time to the affairs of the Wilmington Light Infantry from which was formed Company K, the members of which enlisted for service throughout the period of the Spanish War.

"His genial disposition and thoughtfulness for the welfare of his men endeared him to them. They always referred in the highest terms to their captain and the manner in which he watched over them.

"His father, Donald MacRae, was one of the leading business men of his generation in Wilmington and throughout North Carolina. His grandfather, Alexander MacRae, was the first Superintendent and later President of the Wilmington and Weldon Railroad Company."

Announcement is made that Miss Anne Wentworth will be married in October to Mr. Everett Morss, Jr., to whom her engagement was announced at an informal tea given by her parents, Mr. and Mrs. Strafford Wentworth of Milton. The fiancée was one of the prominent debutantes of the 1924-25 season, and Mr. Morss is a Harvard 1923 man. — Bartlett, of the law firm of Hallaway, Bartlett and Witwer, sends notice of their removal to the Farmers Loan and Trust Company building, 475 Fifth Avenue, New York.

Lyman Sise, who has been an invalid for over a year, writes that he has joined the

ranks of the village philosophers. On pleasant days he takes a short walk over to the general store where he sits on a nail keg and gossips with the natives. — Watch out for an article by Fred Newell in the June number of the *Review of Reviews* on the Mississippi floods. In the September number he will have an article on the Rio Grande, and in December on the Colorado River. It must have been a matter of great satisfaction to Fred to read in the New York *Times* recently that the reclamation project, started by him, and developed by him up to its point of greatest efficiency, has already made fertile 3,300,000 acres of arid land.

Everett Morss has been elected President of the Franklin Foundation to succeed the late President, former Mayor Nathan Matthews. The new President announced the receipt of \$100,000, the gift of the Storrow family. In accordance with the wishes of James J. Storrow, the income from the money will be used in furthering the work of the Franklin Union.

Bates, who is a scientific farmer in Olympia, Wash., doing a little engineering on the side, sends a very attractive description of his farm. The real fact is that the farm is just on the edge of the city and Bates is selling off lots as the pressure demands. Mrs. Bates is a daughter of Isaac Ingalls Stevens, Washington's first governor.

Dave Baker attended the class dinner, looking as hale and hearty as of old. He was not in very good health for a year or two after his return from Australia, but he took a good rest in the West Indies and is now copying Lyman Sise and acting the part of village philosopher for a time at Wellfleet on the Cape. — I. W. LITCHFIELD, *Secretary*, Hotel Wadsworth, 10 Kenmore Street, Boston, Mass.

'87 Granger Whitney writes very interestingly of his recent southern trip as follows: "I have recently returned from a trip to Central America which I thought might be of interest. The main object of the trip was to see something of tropical horticulture, and from this point it was most successful. I spent a day on the banana plantations under the guidance of a Mr. Hartman. His particular work is collecting statistics from various experiments and plotting graphs and curves showing the economic results.

"The next day was spent at an experiment station of economic tropical plants at Lancilito. My companions on that day were particularly interesting. They were Dr. Wilson Poponoe, botanist and horticulturalist of the United Fruit Company in charge of the station. Dr. Barbour, a Harvard naturalist, was making a selection of plants for the Harvard station at Cuba, and with him were two young men who were making a collection of the birds of Central America. Mr. Butler, a most interesting young Englishman connected with the station, was listing Dr. Barbour's collection and preparing it for shipment. Mr. Stanley from the Smithsonian, with one of Dr. Poponoe's assistants, was doing some botanical work. Mr. Hartman, my companion of the day before, was dictating an article in one language to one of Dr. Poponoe's men who was taking it direct on

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the typewriter in another language. To wander through the gardens with these men, and sit on the porch and hear them talk of plants, birds, and animals from all over the world was a most interesting experience.

"Another day was spent in the lowlands of Costa Rica around Port Limon at the banana and cocoa plantations, and the next day up in the highlands through the coffee lands, spending the night at San Jose. Incidentally I stopped at Havana, Guatemala, and the Canal Zone. I was gone a month, met many interesting people and had a most satisfactory trip."

Incidentally Granger offers the suggestion that the Class hold its annual dinner at one of the numerous hostels in and around Williamsburg, Mich.,

President Giles Taintor is in receipt of a letter from Gelett Burgess from Paris, dated February 22, as follows: "Thank you so much for the photograph, duly received. I recognize most of the men, but I find your key rather confusing, on account of the irregularity of alignment. The other photograph I haven't yet received, nor the dates. However, don't bother as to those, as it's too much work to parcel post to France. Thank you though, just the same.

"My work has been stalled for some time on account of the illness of Mrs. Burgess, but I hope to have something more out before long. So glad you liked the little book, though, and I hope you got a laugh out of it, at least. When I came to Paris, I was hailed, for some occult reason, as King of the Cross Words, and everyone played it up, and I gave a lecture. That's ancient history now, though. I am hoping to attend the next Reunion, but my plans now are vague."

B. C. Lane is a member of the reception committee which is to entertain some 1,200 visiting British Congregationalists who are to be in Boston on June 10 to 13. — William B. Blake writes that he is planning a visit in June to his old home city of Newburyport and hopes to take in the class dinner at the same time. Blake's new address is 1002 Farragut Street, East Liberty, Pittsburgh, Penna. — William D. Sargent, 60 Park Place, Newark, N. J., writes that he was in Europe at the time of our Fortieth Reunion, but hopes to be with us at our next meeting.

George W. Patterson is at present Acting Dean of the University of Michigan at Ann Arbor, and as such, will officiate at the commencement on June 18. — It is with deep regret that the Secretary announced the decease of our classmate, Edward A. Jones, of Pittsfield, Mass., on February 29. He passed away very suddenly while driving his car home from his office on that night, although he had been in his usual health during the day. — EDWARD G. THOMAS, *Secretary*, Toledo Scale Company, Toledo, Ohio. N. T. VERY, *Assistant Secretary*, 96 Bridge Street, Salem, Mass.

'88 Allen Hazen of 25 West 43d Street, New York, went to London in June to represent the American Society of Civil Engineers at the Centennial of the British Institution of Civil Engineers. — John C. Runkle has bought the six story Blake and Knowles Building, Sixth and Bent Streets, Cambridge, and has formed the Cambridge

Terminal Warehouse Company, of which he is President. He has also transferred the Elhide Company business to his new building.

The annual class dinner was held at the University Club, Boston, in April, at which plans were made for our Fortieth Reunion and outing at Great Chebeague Island, Casco Bay, Maine, from June 22 to 24, which took place too late to make possible a report in this issue. — WILLIAM G. SNOW, *Secretary*, 38 Chauncey Street, Boston, Mass.

'89 At the annual meeting, March 27, 1928, eleven survivors, seen and saved, of '89's crew sat down to a New England dinner at the Club of Odd Volumes. The number was smaller than it should have been, due, as far as the Secretary is able to judge from the return postal cards, to the growing popularity of Bermuda as a spring resort. (Is this falling off a result of prohibition?) The usual literary and histrionic exercises had to be postponed on account of weighty Institute matters which needed attention, or the semblance of it.

The Class was in a generous mood. In the absence of the Treasurer it was voted to send \$50.00 to Dr. Rowe for his athletic enterprises and to get out a new circular for the Dormitory Drive — for which Lewis Kunhardt and E. V. French were to write out the facts and "Juddy and Jimmy" (Cartwright) were to furnish the heart interest.

Those who gathered about the groaning board were Bliss, Cartwright, E. V. French, Gilbert, Kilham, Kunhardt, Laws, Lewis, Pearson, W. L. Smith, and Wales. All the groaning, however, was done by the board for the classmates seemed to enjoy the occasion. A number of letters were received from the unlucky ones who were absent.

Orrok wrote that he was not able to be present as this was the time when he was making his usual trip to southern colleges, lecturing, and on that particular date he would be at the University of North Carolina. — Jasper Whiting is in South Africa. — Harry Howard on that evening was in Los Angeles on his way back from the Hawaiian Islands and other Pacific Islands where he had been traveling with his wife and having a marvelous time. — Pickering is teaching at Ann Arbor, Mich. His address is 1012 Forrest Avenue. — Beals sent his regrets and we noted by his letter head that he is now the Moderator of the New Hampshire Congregational Conference, this proving, as he added in a footnote, that he is "moderator than ever." — Frank Dame is President of the North American Company, the maps in whose annual report seem to become more comprehensive all the time. — William S. Davenport died of pneumonia in California on April 3, 1928. The Secretary has no further particulars. — W. H. KILHAM, *Secretary*, 9 Park Street, Boston, Mass.

'90 The first painting installed in the National Academy of Sciences at Washington is of our classmate, Dr. George Ellery Hale, director emeritus of the Mt. Wilson Solar Observatory. It is the work of S. Seymour Thomas, a painter of international repute, whose work on this portrait is viewed as one of the distinctive achievements of his

career. Dr. Hale is recognized as one of the foremost scientists and astronomers of the time. He resided in Pasadena and has attained to international note for his work on the nearby mountain and elsewhere in the cause of science and astronomy. It was hoped to exhibit the portrait in Pasadena before sending it east, but was found impossible on account of the opening of the new Academy on April 12.

There is a depth of thought in the expression of the face that suggests immediately the studious and philosophic experience which Dr. Hale has undergone in his lifetime of scientific and astronomical research. Books in the background emphasize this idea of studiousness. Character and personality enliven the face and form; the excellence of likeness is a cause of wonder to those who have viewed the work.

In an address delivered by Judge Martin T. Manton before the Patent Bar Association, the following remarks were made by him, referring to our classmate, Charles Neave, and which may be of interest: "How interesting it must be for you to note the change of expression from happy judicial dignity to indignant severity when you come along with a particularly intricate and long cause as you promised to make the world go around. And when Brother Kenyon, with solemn face, tells us the world will no longer revolve if we do not see the light, or the suave Neave smilingly assures us we can do nothing else than agree with him, I often wonder why we take \$12,500 a year. When dear old Redding of the University of Pennsylvania fame in speech and youthful spirit, wonders what is going to become of us for having beaten him, and young fiery Darby exemplifies no respect for our decisions but merely seeks another circuit, not easier perhaps, but willing to yield to the forensic ardor and missionary work of an ex-judge of the court."

Among the seventy-eight of the nation's "Most Prominent" named by Secretary Hoover to discuss aims and purposes of the 1927 gathering at Tokio to promote international coöperation and good will is the name of our classmate, Calvin W. Rice. Cal is second Vice-President and Sales Manager of the Nernst Lamp Company, a former consulting engineer for the General Electric Company and since 1906 the Secretary of the American Society of Mechanical Engineers. In his earlier career he was also a mining engineer. Among the guests at the annual banquet of the Cornell sections of the American Institute of Electrical Engineers and the American Society of Mechanical Engineers was Cal as Dean of Secretaries of the A. S. M. E.

We note that another wedding is to take place on June 16 in the family of one of our classmates when Miss Harriet Evelyn Royce, daughter of Mr. and Mrs. Fred P. Royce of Dedham, Mass., will be married to Phillip Huntington Theopold. The engagement was announced last May. Fred and his family have been in Florida this winter.

Dr. William Z. Ripley, on account of ill health, has been obliged to resign as chairman of the Board of the Harvard-New England Joint Board of Sanitary Control. — From Edgar V. Seeler we have a change of address at Dingleton Farm, Newtown Square, Delaware County, Penna. We have not heard from Seeler for several years and wonder from the

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above address if he is taking up farming instead of engineering.

Pierre S. du Pont is chairman of the Board of Directors of the seventy industrialists, professional men and labor leaders of the Association against the Prohibition Amendment. The personnel represents organizations employing more than two million men and assets above forty billion. Irénée S. du Pont, '97, is also a member.

Darragh de Lancey's son, Darragh, Jr., has won the Zilph Hayes Palmer scholarship of \$2,500 given to Princeton University seniors to be used in foreign travel and study. Young de Lancey was elected to Phi Beta Kappa, the national honorary academic society. He plans to spend a year abroad for further study of French and German. Darragh, the old man, is evidently busy at home on his modeling work, but Mrs. de Lancey and daughter spent several weeks in California, and your Secretary just missed seeing them at Santa Barbara.

We regret to report the death of Henry W. Kern of Chicago. Mr. and Mrs. Kern were on a trip to the West Indies, having sailed in February, and while taking one of the land excursions to the Island of Martinique, he met with an automobile accident which caused his death. Harry has attended some of our reunions and was an active member of the Technology Club of Chicago, and the sympathy of his classmates goes to his family with deep regrets. He was born in Chicago, September 3, 1868, and passed away at Bridgeton, Barbados, B. W. I., on March 4, 1928. His body was buried in the Westburg Cemetery at Bridgeton. He was a member of the Chi Phi Fraternity, the Chicago Yacht Club, and the Interfraternity Club.

I quote from the Santa Barbara, Calif., *Daily News* of April 19: "Experiments in growing the Redwood *Sempervirens* and the Redwood *Gigantia* are to be made in far-off Pennsylvania and the infant trees with which to make the first experimental effort probably ever undertaken in that state are being supplied by the Verhelle brothers of this city. A carload of Santa Barbara-grown trees and plants left Santa Barbara yesterday for the Pierre du Pont home at Mendenhall, Penna.,

At a meeting held in New York, May 19, Harry M. Goodwin, Dean of Graduate Students at Technology, was elected librarian of the American Academy of Arts and Sciences, one of the group composing the American Council of Learned Societies. — Charles Hayden returned in April from his trip around the world. — Frank C. Baldwin was elected Secretary of the American Institute of Architects at its annual convention in St. Louis, Mo., on May 18. — GEORGE L. GILMORE, *Secretary*, 57 Hancock Street, Lexington, Mass.

'91 Since the last Review the Secretary has been notified of the death of Hugh B. Clement at Oberlin, Ohio, on October 16, 1927. He was ill only a short time.

A letter from Shattuck in Beverly Hills to Will Palmer tells about the letting go of the dam which is a part of the Los Angeles water system, and gives a graphic account of this terrible disaster. His son, George, is building houses, and Shattuck says that most everyone there is interested in real estate or build-

ing. He reports that everything is going along nicely.

At this writing Barney Capen is still at the private hospital in Brookline, but improving all the time. He is walking around on crutches and hopes to discard the crutches in the near future. — Charlie Aiken is at his summer home in Franklin, N. H. He is now a grandfather, Rodgers Bruce Johnson, Jr., being born on April 8. — Charlie Garrison and Mrs. Garrison are on a trip to the Coast by auto. They are used to this sort of thing, and plan a regular schedule, which, as I recollect, was scheduled for twenty-three days from Cambridge to Santa Barbara.

Billy Bryant took a trip to Havana this winter and, according to his postal cards to Barney, he enjoyed that gay city. Charlie Ricker showed him some of the sights and Gorham Dana, the Secretary, and others in the Class can testify that Charlie is a wonderful host. — Charlie Ricker's son graduates from Technology this year. — Frank Holmes took a trip to the Coast last February. George Vaillant took another trip abroad. We are getting to be great globe trotters.

Will Adams wrote a long letter to Barney telling about his work at Kenyon, R. I., where he is Vice-President and General Manager of the Eastern Finishing Works. They have a large plant in Kenyon a short distance south of Providence where they are busy "finishing dyed ducks, waterproofing and mildew-proofing duck, porch curtains and tarpaulin materials, and printed and painted duck awning stripes, as well as specialty shoe goods. In addition to the mill, we own a large part of the village here, the village store, the freight house, and so on. Our community is very much rural as well as small; but we have installed many of the modern improvements and comforts. Nearly every one of our employees is native-born and a good car owner, and most of them own better cars than the boss, which is as it should be; but the responsibilities are heavy and call for my nearly constant presence. My house is just across the street from the mill and my ears are always open for the slightest alteration in mill noises, so that you might say I am on duty, in a sense, twenty-four hours a day." He has a son, a graduate of Technology, who is a chemical engineer at the Diamond State Fibre Company at Bridgeport, Conn.

Ernest A. Hersam, Professor of Metallurgy at the University of California, attended the New York annual meeting of the American Institute of Mining Engineers as delegate from San Francisco. He is a Director of the Institute in that section. Will Basset also attended and was elected a Director. — HENRY A. FISKE, *Secretary*, Grinnell Company, 260 West Exchange Street, Providence, R. I.

'93 It is unfortunate that the inexorable requirements of The Review for copy are such that the account of our Thirty-Fifth Reunion celebration on June 9 and 10 must be written in May, two weeks ahead of the event. By the time The Review is in print, however, this will have been the history of the memorable occasion.

On Saturday, June 9, the members and their ladies, mostly wives and a few daughters, gathered at the Algonquin Club in Bos-

ton where they were the guests at luncheon of Mr. and Mrs. Francis Wright Fabyan and their daughter (the Class Baby), Mrs. Theodore Frothingham, Jr., who at the time of our Thirtieth Reunion was our charming hostess at the tea at Fabyan's summer home at Buzzard's Bay. Immediately after luncheon the party motored to that attractive North Shore resort, the New Ocean House at Swampscott, where the night was spent. The Thirty-Fifth Anniversary Dinner, Saturday evening, was noteworthy in that for the first time the ladies participated in such an event. At Winano, five years ago, they were relegated to a separate table. Except for the dinner, there was no formal program for afternoon and evening, leaving members and guests free to visit together.

Sunday morning, June 10, brought a parting of the ways. A few golf enthusiasts left the New Ocean House shortly after breakfast for the links of the Essex County Club at Manchester, nearby. Most of the party preferred to motor to Marblehead Neck for the morning sail along the North Shore on the yachts *Paladin* (Henry A. Morss, owner) and *Galatea* (F. W. Fabyan, owner) landing at the West Manchester residence of Everett Morss, '85, Treasurer of the Institute, whence the voyagers motored to the Essex County Club, there joining the golfers.

At the luncheon at the Essex County Club the party were the guests of the Class President, William Stuart Forbes, and Mrs. Forbes. After the luncheon the entire party proceeded by motor through the beautiful Essex woods to the Forbes estate at Hamilton where the entertainment consisted of a horse show (the Forbes having a string of fine horses), a baseball game, and afternoon tea. The return by motor to the Ocean House early Sunday evening, where the party disbanded, brought to a close the Thirty-Fifth Reunion celebration. (The Secretary sincerely hopes that this antedated story of the Reunion will prove to be true history.)

Through replies to the notice of the Reunion some bits of news have trickled in. We learned that Charles Tripp was sailing for England on May 10 and would have to have his reunion dinner in London with Rigby Wason. Arthur Fowle, of La Esperanza Ranch, Los Altos, Calif., wrote: "It is a big disappointment that I cannot be at the Reunion. I am always too far away. I am now a real rancher, and surely it's the life — out here in California. If you ever come out be sure to look me up. Only thirty-five miles from San Francisco. Remember me to the boys, please."

Ernest C. Bryant said: "I cannot be with you at the Reunion. I had such a jolly time five years ago that I hate immensely to miss this one. There is no help for it, so I will wait for the next one." — George Dearborn could not come; he had a sales meeting which had to be attended. It was a case of business before pleasure, apparently. — Fred Baker was abroad at the time of the Reunion.

Howard Sargent could not come to the Reunion as he had to attend the annual meeting of the National Electrical Manufacturers Association at Hot Springs, Va., and added: "I wish you would convey to our classmates my regrets at being unable to be present and also the statement that I shall be present in spirit, if not in body. By spirit, I do not mean

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what some present may have in mind as I am essentially a teetotaler in my effort to live to attend the Fortieth Reunion."

Looking back over a span of thirty-eight years we all remember the drum-major who led "the band" at our freshman military drills. Harold Meade Mott-Smith, or Motty as we knew him could not come to this year's Reunion, but his absence was fittingly explained by the following letter to the Class Secretary: "Greetings — to yourself and the Class — and please accept the modest enclosure with gentleness. It should have been multiplied by thirty-five were it not that in the month of June I am to part with my last masterpiece when I give away the 'Baby' in marriage. And thus, too, will I be deprived of meeting you all, after this light span of years."

"Permit me to effervesce a reflection. In the sight of my Muse, thirty-five years are but as a single day. I have just finished my course of training and now stand on the threshold of life, looking forward with youthful hope and vigor towards a glorious future. I have just graduated; my palette is my cap, my smock my gown, and my diploma reads, 'Art Student.'"

"'Young Feller,' said the elevator boy to me the other day. 'Say it out loud,' said I, 'so all may hear it.' What I felt when he called me that is too good to keep, so I pass it on and send greetings to all you 'young fellers' — the Class of '93."

A change of address has come in for John R. Brittain. Mail has been returned from Harry W. Joy, Orren Allen, Hereford Berry, Laurence B. Dixon, William B. Gamble, and Faustin A. Perez. The secretaries will appreciate receiving any information about the location of these men.

Word has been received of the death of Harry R. Callender, of Los Angeles, at Mentone, France, on April 8. Callender was with the Class only during the freshman year, but he will be remembered by the many friends he then made. After leaving Technology he was for a short time in a stock brokerage office; and early in 1892 he went to New Mexico on a cattle ranch for his health. In the fall of that year he went to Los Angeles, Calif., which was his home until his death. In 1897 he entered the partnership of Wright-Callender, engaging in real estate and insurance business. This concern, which in 1900 was incorporated as Wright-Callender-Andrews Company, was active in promoting the remarkable growth and development of Los Angeles. Later Callender became the senior partner of Callender-Manwaring Company in general insurance business, specializing in industrial insurance. For many years he was prominent and active in business organizations and civic affairs of Los Angeles, although at the time of the Thirtieth Anniversary he modestly wrote, "Have done nothing brilliant or spectacular but have helped in a small way in the wonderful development of the community and am raising a family of which I am proud." Harry Callender was born April 13, 1871, in Chicago. He married, on January 11, 1900, Miss Ada Patterson and they have two children, Harry Rea, Jr., and Virginia Patterson. — FREDERIC H. FAY, *Secretary*, 44 School Street, Boston, Mass. GEORGE B. GLIDDEN, *Assistant Secretary*, P. O. Box 1604, Boston, Mass.

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The sudden death of Mrs. Henry Batcheller at Eugene, Oregon, was announced a few weeks ago. Several months ago Batcheller and his wife started for the west by motor car and arrived in Oregon in the early winter, where they visited Batcheller's brother, Professor J. H. Batcheller, '00. They were planning their homeward journey and almost without warning Mrs. Batcheller was stricken and survived but a few days. The warmest sympathy of the whole Class will be extended to Batcheller in his bereavement.

The Secretary recently had a most enjoyable, but all too brief visit with Jim Kimberly. With Mrs. Kimberly, he has been spending a portion of the winter and spring at Tryon, N. C., and visited Boston the first of this week, on their return, to make arrangements for the entrance of James, Jr., in Chauncey Hall School in preparation for the Institute. It was a great pleasure to the Secretary and Mrs. Prescott that they were able to call on them at the Copley Plaza, discuss the school from a personal standpoint since the two Prescott boys are enrolled there, and make plans for the trifling services which we may be able to extend to young Kimberly on his arrival in Boston next autumn. On Tuesday morning Kimberly visited the Institute and was shown about by the Secretary. He expressed his interest and admiration in the way in which affairs are developing here. Incidentally, an older son who was at the Institute two or three years ago has recently assumed a very important position in the Kimberly, Clark organization, of which Jim is Vice-President. It is to be hoped that all '94 men who have sons coming to the Institute or to other schools in the vicinity will make their presence known in a similar manner.

The campaign for the '94 Dormitory is moving on fairly steadily, even if slowly. It is hoped that the amount of money required for our dormitory, \$80,000, will be subscribed within the next few weeks so that the construction work may not be held up due to the delinquency of our Class. We still have about \$20,000 to go and the Secretary takes this means of informing and urging those members of the Class who have not already responded to his letters to exercise the privilege (for it should be regarded as a privilege) to make as generous a contribution as they can to the fund. There are still over a hundred men in the Class from whom no replies have been received to date, and it would greatly help the work of the Committee if these men would respond to the inquiries which have been put out. — SAMUEL C. PRESCOTT, *Secretary*, Room 10-405, M. I. T., Cambridge, Mass.

'95

It's a long lane that has no turning. The '95 Dormitory Fund campaign has so occupied the time of your Secretary that his reports to you have been few and meager. However, we are going to have a dormitory in some form or other, because the subscriptions are still coming in as this goes to press. It is desired to express the appreciation of your class officers to those who have so kindly and nobly responded to the call, and remember that all subscriptions of whatever amount have been duly welcomed and have swelled the amount to within a few thousand dollars of our goal.

It has been a "hot campaign," yet a glorious one, as the replies to our various circulars or bulletins have evidenced. This campaign has brought your Secretary in touch with many men of '95 who had previously not been heard from for some years, and the general interest has been most gratifying. If you have failed to reply, remember to send your yes or no with the amount to your Secretary at once. We want everyone represented if possible — at least by some reply.

We had a reply from Estado de Lulia, Venezuela, S. A., where Weston is. Part of it was poetry; the rest follows: "I hope I get another one of your letters before mine reaches you. They are very interesting from a promotion standpoint. My address is always Sharon, Mass., so send the rest of the series. If there are any winter travelers among the Class, who would like to get warm, just tell them the latch string is out at the Weston Apartments in Central Venezuela. Guaranteed 90° Fahrenheit."

An interesting trip of 8,500 miles, down the Atlantic Coast, up the Mississippi, and across Canada is reported by Lt. Parker H. Kemble, XIII. "With his wife and son he circled half the United States in his staunch little black power boat, *Ambra VI*. The big swing was made in a trifle over a year, the circumference being the Atlantic Coast from Massachusetts Bay to Cape Sable, Fla., the eastern shores of the Gulf of Mexico, the Mississippi to the Illinois, across country to Chicago, the doubling of the Michigan peninsula, through beautiful Georgian Bay and the devious but picturesque wanderings of the Trent Canal system in southern Ontario, down the St. Lawrence and home by the way of Lake Champlain and the Hudson. The start was from Marblehead on September 15, 1926, and the finish at Oyster Bay on September 24, 1927; and with the exception of a few miles outside of Florida and in the Gulf of Mexico, and a little railroading in Canada, the *Ambra VI* confined her 8,500 miles of motor to inland waters.

"A few weeks' fishing on the Keys and giving Key West the go by, the *Ambra VI*, having cut the twenty-fifth parallel, headed north, dropping into Everglades, the scene of an interesting development by Byron Collier. One of the most interesting communities on the West Coast was the Greek sponge fishing industry at Tarpon Springs. The bane of the Gulf of Mexico is the norther, which comes with scarcely any warning. Everything under sail hurries to shelter, but many are caught and are driven miles out into the Gulf, sometimes to Cuba. But the Greeks at Tarpon Springs seemed to have developed a warning or sixth sense. The day may be 'fare and brite,' when suddenly all hands up-anchor and start home, and a few hours later it is blowing sixty miles an hour.

"The devastating flood was sweeping down the Mississippi, and it looked like a long, stiff 1,200-mile climb against a five-knot current up to St. Louis, so our voyagers 'let George do it' by hooking on to a river steamer, shoving off now and then to view the levee reclamation work on either shore. The tow cost \$300, or perhaps \$75 more in fuel and oil than if the *Ambra VI* had relied on her own power.

"Half way through to Lake Michigan the

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Ambra VI branched off and ran over to Davenport, Iowa, but when she headed back the Illinois and Michigan Canal was in such bad shape that the boat had practically to dredge her way through some of the shoal spots and she limped into Chicago on July 21 with a crumpled propeller shaft, but fortunately shipped a new one in three days.

"After a run up to Milwaukee the boat was headed over to the eastern shore and through the Straits of Mackinac, but instead of following the regular course through the Great Lakes, she kept over to the Canadian side and chugged through beautiful Georgian Bay to Port Severn, thereby cutting out Lakes Huron, St. Clair, Erie and Ontario, and fetching up at Kingston at the Head of the St. Lawrence. After a couple of weeks at Montreal she headed for New York, running up the Richelieu to Lake Champlain and through the barge canal to Albany and so down the lordly Hudson, reaching Oyster Bay in season to see another international sealing contest with eight nations struggling for the Scandinavian gold cup which the Swedes finally captured. Here the amblings of the *Ambra VI* were practically concluded, for the boat was laid up for the winter at Huntington, while Lt. and Mrs. Kemble came back to Marblehead by train. 'And we can't recall an unenjoyable moment,' said the skipper as he closed his big log book."

This trip of Lt. Kemble completes a twelve-year study of the inland waterways of the United States and Canada, during which he has taken his boats in excess of 16,000 miles through every important canal and waterway east of and including the Mississippi. He is probably closer in touch with the inland waterway system of eastern North America than any other single individual. —LUTHER K. YODER, *Secretary*, Chandler Machine Company, Ayer, Mass.

'96 Inasmuch as Rockwell is away on his annual two-weeks fishing trip with Ben Hurd, his only contribution to this grist of news will be a post card from Wachapreague, Va., to the effect that he and Ben are meeting with winds and high tides which make the fishing poor, but they are both having a great rest with beautiful days and plenty of grub.

Dickinson, who is a professor at the University of Vermont, Burlington, called on the Secretary on May 14. He was passing through Boston after having attended the convention of the American Institute of Electrical Engineers at New Haven where he represented the University of Vermont branch of this organization. Dickinson did not have much to report in the way of news beyond saying that he sees Moat and Jacobs frequently in Burlington and they are both keeping out of jail. One tip he did give was that in spite of newspaper reports to the contrary, automobile riding for tourists in Vermont this coming summer will not be at all ideal. It is going to be impossible to repair bridges and re-surface the flooded roads so as to get them back this year into the condition for which they have been famous in the past.

Correspondence with Charlie Lawrence failed to bring out any news of great importance from this never-failing supply. About

the only item he could give was that he was extremely busy on his job and also that his boy, Dr. Charles K. Lawrence, who received his Doctor's degree from Technology, was now located in Syracuse, N. Y., and was planning to get in touch with the '96 men in that vicinity.

Henry Jackson dropped into the Secretary's office one day in April to report that he and Mrs. Jackson, with their son, were sailing on June 6 for an European tour of three months to England, France, and Switzerland. Incidentally they will visit the habitat of the old Jackson family in England and as Henry has a full equipment of cameras, moving picture machines, and the like, we may expect next year an illustrated talk by him on his European trip.

Danny Bates got his name into print in the form of an announcement sent broadcast to his friends and business connections stating that he was retiring from the Vice-Presidency of the firm of Day and Zimmermann, Inc., to become President of Bates, Inc. This new firm will have the management of L. F. Grammes and Sons, Inc., and the Cold Spring Bleachery, formerly handled by Day and Zimmermann. In other words, Bates's change is largely one of name only, in that his work will be about the same as heretofore, but instead of being a subordinate Vice-President he will henceforth be the big mogul occupying the President's chair with, presumably, a marked increase in salary and responsibility.

Mort Tuttle, who is President of the Morton C. Tuttle Company, announces that his firm has the contract for the enlargement of a big garage in Portland, Maine. When completed, the enlargement, with the original, will form the largest garage in the city. The new building which will be of concrete or brick, costing around \$100,000, is expected to be ready in early July.

About this time of the year Con Young can be counted on to furnish the Secretaries with material for the last issue of *The Technology Review* for the season and he has not failed us this time. A personal item about himself is to the effect that his health has not been 100 per cent of late and his doctor has consequently advised him to devote a year to rest and to the recovery of his health. With this object in view, Con is giving up his work on July 1 and arranging to dispose of his residence so that he will have absolutely nothing on his mind. His plans are to spend the summer on Cape Cod, probably going to the Adirondacks in September to keep his annual date with the fish there. Further plans are not definite but it looks like Florida or some southern clime for the winter. On account of his poor health he has not been able to follow lately his hobby of amateur acting and radio broadcasting.

Classmates may not fully appreciate that we have a noted artist among us. Young reports that several weeks ago he attended an exhibition of oil paintings at the Arts Club in the old Monroe homestead in Washington, and there he and Mrs. Young met Minor Jameson. It developed that Jameson was attending the annual meeting of the Washington Society of Artists of which he is Secretary. After looking the exhibition over Con and his wife both selected two charming landscapes in oil which they, as well as some of their friends, thought were the best in the

exhibition, and later on they were much surprised to discover that both of these paintings had been done by Jameson in his spare hours from his work in the Interstate Commerce Commission. Con said that Joe Clary was sticking to his job, and gaining satisfaction from his son's progress at Technology and from the honor that had come to his daughter in her recent election as President of the Senior Class in the high school. When Con gets located on Cape Cod this summer the latch-string will be out for all '96 friends who come his way. He expects that it will be at Provincetown, especially as Buster Crosby is thinking of spending the summer in Provincetown this year.

The latest report from Jim Melliush was in the form of a note written in May while he was on board one of the steamers of the United Fruit Company en route to Barranquilla, Colombia, where he expects to be located for the next year on the design of a system of sewerage for that city of 100,000 people. He had two other engineers with him as the nucleus of a staff. There is a possibility that his stay may be considerably prolonged in case he should find that his services are needed for construction after the preliminary year of design. He was looking forward to his stay in Colombia, although regretting that he was going to be so far away that he would be out of contact with the Class and unable to come to Boston for any reunions in the near future. Letters from classmates will be most welcome to him and should be addressed care of Parrish and Company, Barranquilla, Colombia, S. A. — All '96 readers will be interested in the report elsewhere in this issue of the death of C. H. L. N. Bernard which occurred on June 4.

These are the last class notes for this year's Review, and the Secretaries have, consequently, a vacation as far as the preparation of class notes is concerned, until next fall. They therefore take the opportunity to express to all classmates their best wishes for a pleasant summer and a good rest. — CHARLES E. LOCKE, *Secretary*, Room 8-109, M. I. T. Cambridge, Mass. JOHN A. ROCKWELL, *Assistant Secretary*, 24 Garden Street, Cambridge, Mass.

'97 In order to do my part, in January, fourteen letters were sent out to various members of the Class, purposely selected at a distance, and those who had not in the past participated to any extent in class activities either by being present at reunions or by furnishing any information for *The Review*. Only four replies were received to the fourteen letters, and one of these four was the result of second letters sent out in certain instances.

Thomas C. Atwood writes as following: "I have looked askance at your demand for news a number of times, but I might as well get it over with, and proceed on the assumption that there is some, which there really ain't, for my life here in the sunny South has contained little that is new or exciting in late years. I am still paddling my own canoe, as it were, as President of Atwood and Nash, Inc., Engineers and Architects, with offices in Chapel Hill, Durham, and Raleigh, N. C. It keeps me moving to keep one force of about fifteen supplied with work all the time and

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try to make the income a little greater than the outgo.

"My family is still the same — one wife, the best ever. The older boy graduates at Duke University this year and then may go to Technology for post-graduate work in chemistry. He is six feet, two inches, and I think will not catch up to the old man; but the younger boy has me worried. He is fifteen years old and six feet tall. He grew four inches this past year, so he may out top me yet. We are all sold on this North Carolina climate, and enjoy our life here very much. The fact that we are damyankees of the most virulent variety (Boston) doesn't seem to worry the folks here much, and we find the real natives are mighty fine people as a rule. We built us a home last year, a real New England home, too, and we are revelling in its comforts. After living in New York for years it sure seems good to be here where there is still plenty of elbow room, and where minutes are not regarded as ruling our life completely. The railroad timetables have few terrors, for I simply step into my auto and whiz anywhere I want to go over the finest roads in the country. I wish some of the Class would visit me some time. I am sorry to miss the Reunion, but I was too busy at the time to get away."

Concerning Barkhouse at St. Louis, the following notes are offered: you all remember Barkhouse as a red-headed, silent youngster, sticking close to the job ahead, but few will remember the one occasion when he exploded violently in first year, during one June morning, after a particularly trying lot of flies had been promenading over his drawing-board. The explosion was something like this: "Blankety blank, if I ever get through this place and get a degree, I'll build something that will let a man work in peace in fly time!" Sure enough he has done it. As the head of the Emerson Electric Manufacturing Company of St. Louis, he produces yearly some half a million of the best kind of fly protection in the shape of A. C. fans, and still says so little that it was like pulling teeth to get this much information.

Henry F. Hoit at Kansas City writes as follows: "How am I going to explain my neglect to you? Really it was a great pleasure to hear from you, but when you asked me to write a few lines about myself, I just kept putting it off and each time I left the city, I would say to myself, 'When I return I will surely write Wadleigh.' Well, your second letter certainly pried me loose, but for good-sake don't publish that. I give in."

"Since seeing you, I have been busy with the great housing problem, both commercially and domestically. I do not expect any monument erected in my memory, however, but neither did old Sir Christopher Wren, for as you will probably remember, he left orders to have inscribed on his tomb in St. Paul's, 'If you would see my monument, look about you.' There is one thing that I take pride in, however, and that is I am the successor to the old firm of Ware and Van Brunt, who practiced in Boston many years ago. When Professor Ware took the Chair of Architecture at Columbia University in New York the firm became Van Brunt and Howe, and it has been a straight succession down to the present time."

"For the past four years I have been consulting architect for the new city of Longview,

Washington, that is being built by the Long-Bell Lumber Company, where the new mills, the largest in the world are located. In 1924 I made a hurried architectural trip to Europe, and expect to go again soon. If I sail from New York I will surely give you a ring. Just at present the office is engaged in a most interesting problem. Several years ago we built the fourteen story building here for the Southwestern Bell Telephone Company, and now we are busy topping it off with fourteen more stories, making twenty-eight in all. We are carrying it up symmetrically and whole composition will form a big Gothic tower.

"It may also interest you to know that I am consulting architect for Mr. R. A. Long, Chairman of the new National City Christian Church, which is being built in Washington, D. C. It is hoped that I shall have the pleasure of seeing you again before long, either here or in New York."

Hoit's request to refrain from publishing a previous letter was because the letter originated at this end of the line. He was asked to choose the alternative of writing a better letter or allowing the letter sent him to be published. He chose the former as the least of the two evils.

Concerning Motch, it must be fifteen years since he last submitted any notes. Since that time, specifically since the war, he has been busy at work marketing the Buckeye Thermo Miller, which machine took the machine tool trade by storm. It's an old story to those inside, but if it had not been for that machine it is quite certain the new Ford car would not even now have been in production. Rumor has it that the machine was used in the manufacture of 'We' that flew across the Atlantic. This Motch does not deny.

It was not until Motch had really accumulated something in the regulation machine tool building that he could perfect this machine, which he has had in his mind for twenty years. Briefly, it consists of a combination of acetylene torches and milling machine, the rough cutting to an accuracy of 1/100 of an inch being furnished by the torches, and the finishing being carried out with more or less standard milling cutter. The key to the machine has been in the cooling arrangements to prevent distortion of the material worked on. Motch has to offer some startling figures concerning the capacity of this machine and the effect it is going to have on the manufacture of almost all machine tool products. It would appear now that the scheme is developed, Motch has been able to turn its marketing over to other people, because of the amount of time he can spend on his yacht in and about the Mediterranean. If any of his classmates are in the vicinity of his 5,000 ton cruiser, *Bee Hive*, he will feel very much hurt if they don't pay him a lengthy visit.

While the above will by no means make a real claim of news, it seems to be the best that can be offered, considering the apathy of the class members as a whole and the time at the writer's disposal to stir up the slothful ones.

We have just heard that Thomas R. Weymouth, formerly President of the Iroquois Gas Corporation of Buffalo, has resigned his position to accept the presidency of the Oklahoma Natural Gas Corporation, Tulsa, Okla. Tommie assumed his new duties on May 1. — JOHN A. COLLINS, JR., *Secretary*, 20 Quincy Street, Lawrence, Mass. CHARLES W. BRAD-

LEE, *Acting Secretary*, 261 Franklin Street, Boston, Mass. GEORGE R. WADLEIGH, *Secretary pro tempore*, 200 Fifth Avenue, New York, N. Y.

'98 At the moment of writing these notes we are looking forward to our Thirtieth Reunion at Manomet Point,

Plymouth, Mass. It promises to be the best and biggest Reunion we have had; the account of it will probably have to go over to the November issue of *The Review*. Just think of it — thirty years since graduation, the majority of us fathers of children at college — fourteen '98 sons are attending or have been graduated from Technology; a lot of us with grandchildren and one grandson entering college next year. These five-year reunions mean more and more to us as time goes on, renewing and keeping tight that strong bond of common interest which originated while we were striving to fit ourselves for our part in the work of the world, and which has developed as we have kept track of the greater and lesser achievements of each other. Our thirty-year book of biographies, which will be ready for distribution at the Reunion, and which will be mailed to all not present, is an impressive record of achievement of which our Class is very proud. This in spite of the innate modesty of those who fill out the questionnaires in the least glowing language as regards their personal accomplishments. Would that each classmate had given the blank questionnaire to an appreciative historian who would not have suffered so from modesty.

W. W. Stevens wrote on April 23 from Yokohama: "I shall not be able to attend the Class Reunion this year. I am on foreign construction work again — this time in Japan with the Standard Oil Company of New York. This is the second time I have been in the Orient for this company, the former time being in China in 1914-1918. My work is to build their new office building in Yokohama, replacing one destroyed by fire after the great earthquake of September, 1923, and to replace with a new and larger one their importing and packing plant and to provide new residences for staff. The office building, which is said to be the finest the company has, next to 26 Broadway which is not sole property, is to be completed in two months, but the other work will likely last out the year. After that, unless the Standard Oil Company finds something further for me or unless some other company wants me on foreign work, I shall probably be returning to the United States but too late for the Reunion. I regret that I cannot be present, but hope you will tell the crowd that I wrote, sending regards and best wishes."

Charlie Winslow writes as follows: "It is a very great disappointment that I must miss the Thirtieth Reunion. I think that I have never been absent from any important class meeting before, but, unfortunately, I have two long-standing speaking engagements which make it absolutely impossible for me to get to Osterville. I speak in Rochester on the evening of the thirty-first, and leave New Haven Saturday morning, June 2, to get to Louisville where I have to give another talk. Won't you give everybody my most affectionate greetings and tell them how deeply disap-

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pointed I am that I cannot join in the festivities? I shall be with you in spirit and very envious of the gorgeous time you will all have."

We insert here a recent clipping from *Science*: "Professor C. E. A. Winslow, Lauder Professor of Public Health in the school of medicine at Yale University, has been awarded the Ling medal by the Ling Foundation of Los Angeles, 'in appreciation and recognition of Professor Winslow's active and unselfish work in behalf of the health progress of school children.'"

Percival Lombard has been under the doctor's care for some months and writes with great regret that the doctor will not allow him to attend the Reunion. In the Boston *Herald* we noticed an architect's sketch of the proposed restoration of the Colonial Trading Post and we clip a few paragraphs from the accompanying article: "An appeal for \$50,000 to establish an endowment for the construction and upkeep of a memorial park and building dedicated to the colonists, who in 1627 blazed the first trail for American business, has been launched by the Bourne Historical Society.

"Percival Hall Lombard, President of the Society, aided by members, has uncovered, after painstaking research, the exact spot of the first trading post in New England and the only one of the earliest trading posts in America of which anything now remains.

"A distinguished committee has volunteered its services and coöperation in making and preserving the site of Aptucxet, the name of the first trading post located on the south side of Cape Cod at the beginning of the ancient Manomet River portage now near Bourne. . . . The money that will be raised will be devoted to the construction and upkeep of this building in addition to the cost and improvement of the twelve acres of land purchased, and constituting part of the memorial.

"Great care has been exercised by the Society to make sure that the replica duplicates the original in every particular. Mr. Lombard points out that the land surrounding the site, bordering on the canal which is destined soon to become one of the nation's great inland waterways, will be laid out as a public park and will be open to the public at all times as the shrine where the first milestone of America's business was raised."

Roger Babson was a big figure at our Twenty-Fifth Reunion. Not only did he contribute serious dignity to the occasion but he supplied as much humor as any one present. Nobody succeeded in joshing him, and many tried, but they all got back better than they gave. We all regret, as well as he does, that his giving the Commencement address at the University of Florida keeps him from the Reunion. — ARTHUR A. BLANCHARD, *Secretary*, Room 4-160, M. I. T., Cambridge, Mass.

'99 In a letter received from Harry L. Morse, he gives his new address as 7 Craigie Circle, Cambridge, Mass. In addition he writes as follows: "The fifteenth of this month I had the pleasure of starting work with the State Street Trust Company of this city, in a department as yet without a name, which has no parallel in any other Bos-

ton bank, which is charged with the supervision of industrial accounts from the standpoint of the industrial engineer. Accounts judged by usual banking criteria to be poor, sickly or just weak, are our immediate and continuing responsibility. After such are taken care of to the best of our ability we propose to try to enliven the accounts which are only stagnant — if our services are acceptable — by timely suggestion and counsel. The work is stimulating, responsible, and promises to be extremely interesting."

Walter C. Whitney writes as follows from Newton, Mass.: "Well you surely did yourself proud in the last issue of *The Review*, which arrived the first of the week. (Walter is referring to the April issue.) Last week one evening I was listening in on the radio when I heard mentioned the name of George Priest, Manager of the Brockton Gas Company and Vice-President of the Brockton Audubon Society, in connection with an adventure which was a battle with an infuriated blue jay which had grabbed a long, slender knife in its claws and was flying wildly about the kitchen of Mr. Priest's home, endangering Mrs. Priest, who was alone in the room. Mr. Priest had just caught the bird in one of his traps and had brought the bird to his home to examine the band, when it got away from him. After flying around the house, with Mr. Priest in pursuit, the latter gave up the chase for a little rest. The bird then flew into the kitchen and grabbed the knife from the sink where Mrs. Priest was at work. This appeared also in the Boston *Globe*, but I refuse to vouch for the truth of it." (B. E. Morse also reported this item.)

Walter also contributed the information that Ben Hinkley is recovering from an automobile accident. He was run into by a truck in Taunton, his car was smashed up and his collar bone and ribs were broken. He was getting along nicely after two weeks in the hospital, but he did not keep his promise to Walter Whitney to write the *Secretary* about it. The item was indeed welcome, though the incident was regrettable, and there is no doubt that all who read this will join your *Secretary* in wishing the victim a speedy and permanent recovery.

From Alex R. Holliday comes the following: "Arthur Hamilton's letter in the April column that you just ran inspires me to write you even if I am just back from a three and a half months trip and behind in the work. I left here the first of the year for Egypt with Mrs. Holliday and after five weeks there came up through Italy, Paris, and London. The Egyptian part of the trip was by far the most interesting. I had a limited amount of money to spend for the Museum here of which I am a director. Dr. George A. Resner, head of the Boston-Harvard Expedition, comes from Indianapolis, and was helpful in suggestions on the choice of objects. I do not know if the collection as a whole will ever get here on account of the present law prohibiting export of antiquities from Egypt. All hope that there will be a change, but with the Nationalist Party in power again, it does not look favorable. If it does come, it will be a rather representative collection although small. The job, as well as the spell of Egypt, has turned me like many another into a near-Egyptologist. Why anything so remote from our cultural background should fascinate one,

I cannot tell. It is, however, a history and civilization that does deeply interest many who come in contact with it. What I say above applies to ancient Egypt only. Present government in Egypt is a lot of boys running the show to see how much they can get out of it, and England has a big problem there to keep some kind of order. Should she step out, either Italy or France will be glad to step in and try their hand at running the country. I think the English feel strongly a moral responsibility as well as a desire to protect their large investments. There are eight hundred thousand Christian Copts in Egypt who would probably get their throats cut pretty soon after the English leave. We are apt to sympathize with a people demanding freedom and think Great Britain harsh, and we are apt to forget that in our Pacific Islands as well as in Porto Rico we have the same problem. We are keeping a much tighter rein on ours than is kept on Egypt by Great Britain.

"Buying in Egypt brought us in contact with people the ordinary tourist does not meet. So that part of the trip was different from our ordinary trips in which we are just sight-seers. Paris looked better than ever, and it certainly is the best looking city in the world. I regret more and more my little knowledge of French, especially when stacked up with Mrs. Holliday who speaks society French. All of my children will be made to learn the language well. The trip was the best we ever had, and we have had some interesting trips. I hope you are well and that this will take me off your list of delinquents for some time."

[A continuation of Arthur L. Hamilton's diary must be held until some issue next fall because of lack of space in this issue. — *The Editors*.] — W. M. CORSE, *Secretary*, 810 18th Street, Washington, D. C. A. H. BROWN, *Assistant Secretary*, 53 State Street, Boston, Mass.

'01 It is my painful duty in this letter to record the death of two members of the Class: George A. Cowing died at his home in Cincinnati, Ohio, on March 13, in his forty-ninth year. He prepared for Technology at the Powder Point School in Duxbury and entered Technology with our Class. After leaving the Institute he took up a specialized course in chemistry and became chief chemist and later director and treasurer of the Harkness and Cowing Company, in which business he was associated with his father. Cowing was one of the organizers of the Technology Club in Cincinnati and has always been much interested and active in its affairs. He is survived by his wife, Irene Wagner Cowing, and two daughters. The Technology Club of Cincinnati passed resolutions at the time of his demise, and similar resolutions have just been passed by the Class.

The other is that of Frederic Roy Courtney Boyd, whose unexpected death was reported but a few days ago. At present writing full details are unavailable. Apparently an acute condition developed requiring immediate operation. The condition had progressed, however, so far that intervention was unsuccessful and he died within a few hours. Freddy Boyd was one of the best known men in the Class in undergraduate days, and those of us situated in Boston have conserved the friend-

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ship deriving from that time. He served for quite a long period as class President and participated actively in the class reunions of the last few years. For a number of years he was in partnership with his friend and classmate, V. F. Holmes. More recently, however, he established other affiliations, heading his own company. I shall hope to have more information, and by next writing will then give the details to his many friends scattered throughout the country. Mrs. Boyd survives him. Resolutions have just been passed by the Class for transmission to her. It was only a short time before his death that he gathered together a group of his classmates on the occasion of an address by Matt Brush before the Boston Chamber of Commerce. Notice of this was included in my last notes.

A letter was received recently from Allan McDaniel that contains matter of interest to the Class. Like Fred Clapp he has been wandering in the Near East and sends me a brief but interesting sketch of his travels, which I reproduce in part: "You will be interested to learn that I have recently made my debut in Europe and the Near East. This was my first trip across the water, and I was very much interested in the many varied phases of water and land travel abroad. The farther one gets away from home the less the physical comforts and material conveniences, but the greater the picturesqueness and atmosphere. The latter, I presume, is largely due to historical background, but perhaps slightly to the lack of cleanliness and simplicity of existence.

"My better half and I had a very enjoyable visit in Paris and then went on and spent a day in the city of canals and gondolas. From this ancient home of the Doges, we crossed the Mediterranean and had the pleasure of getting thawed out in the picturesque delta country of Egypt. This is certainly the land of sunshine and vultures. Our final objective was Palestine, and here we spent a most enjoyable two weeks. The Holy Land is certainly one of the most interesting countries on the face of the earth. There is a peculiar charm, beauty and picturesqueness about this little country that one seems to find nowhere else. There are more varieties of topography and climate to the square mile here than in any other place I have ever been or heard of. Here is where you get the maximum amount of atmosphere in the minimum amount of space. Again, I assume that this is due to its marvelous historical background.

"In addition to absorbing the atmosphere I spent many enjoyable days in going over with Mr. Rutenberg and his associates their plans for the water power and irrigation development of Palestine. It seems almost a sacrilege to harness the waters of the Jordan, but when it is done this little land will certainly be illumined. Just before leaving Palestine we had the pleasure of conferences with several of the higher British officials. They are doing a splendid work in the administration of this little country, and incidentally assisting the Zionists in their endeavor to establish a national home for the Jewish people."

Under the date of May 12 I am advised by Perk Parrock that he claims the distinction of being the only member of the Class to attain the age of fifty on that date. He is prepared to defend this claim, and I sincerely

trust that any member of the Class offering a counter claim with a reasonable degree of ingenuousness will not hesitate to place supporting affidavits in my hands.

Bill Pepperell has at last emerged from the obscurity of his postoffice box, and is installed in palatial quarters at 125 Congdon Street, Providence, R. I. As many of the Class will remember, Bill was a polyvalent treasurer of a large number of milling enterprises of Rhode Island. In addition to these he has just become President of the Hebron Realty Company, which I presume accounts for the change in address. He is now in active control of the New York offices of the Grosvenor-Dale Company, and of the Warren Manufacturing Company, and is spending about half of his time in the latter city. His address there is 40 Worth Street, so that Bill has certainly blossomed out in the matter of habitations. He extends a cordial invitation to all 'or men in New York to get in touch with him. Bill has gone steadily forward in the milling industries since his first employment by the Draper Company of Hopedale.

Though the courtesy of The Review, I learn that Bill Sayward, now resident in Atlanta, Ga., has been elected second vice-president of the American Institute of Architects at the time of their annual convention in St. Louis. If memory serves me, Ellis Lawrence holds some sort of a snappy job with this organization, and for all I know other members of the Class may be giving it the privilege of their important and highly skilled services. Unfortunately that modest reticence which I am coming to believe is a distinguishing characteristic of the members of this Class has prevented your Secretary from receiving more specific information. Perhaps if this catches Bill's eye he may drop me a line and tell me more.

Through the courtesy of one Philip Wyatt Moore who from time to time emerges from the seclusion of his Private Road to mingle with what Mrs. Lighter used so aptly to designate as the *boi canaille*, comes the following: "Robert M. Derby, manager of the foreign department of the Niles-Bemont-Pond Company and the Pratt and Whitney Company, 111 Broadway, New York, sailed recently to Europe for a several months' trip. Prior to his departure a luncheon was given by the foreign department at the Machinery Club, New York, commemorating the fiftieth anniversary of the foreign department and the twenty-fifth year of Mr. Derby's association with the company." — ALLAN W. ROWE, *Secretary*, 4 Newbury Street, Boston, Mass. V. F. HOLMES, *Assistant Secretary*, 131 State Street, Boston, Mass.

'02 Lou Cates was chosen one of the delegates-at-large from the State of Utah to the Republican National Convention at Kansas City. As President of the Hoover Club of Utah, his ideas on the proper candidate are easy to surmise. — The engagement is announced of Mrs. P. J. Dinsmoor of Boston, formerly of Denver, to our classmate, Elliot Ritchie. The wedding is to take place in August, and Ritchie and his bride will make their home on Dunster Road, Chestnut Hill, Mass., where Ritchie has recently purchased a house. — Harold Pope's

address is 13725 Dexter Boulevard, Detroit, Mich. John R. Morse is at 39 W. Hudson Avenue, Dayton, Ohio.

Honors at Technology have lately come to the sons of two of our classmates — Robert Wood Reynolds was elected editor-in-chief of the *VooDoo*, the student humorous paper, corresponding somewhat to the well-known Harvard *Lampoon*. This publication in a way fills the field of humor which in our student days was occupied by "The Lounger" in the columns of *The Tech*, and of the "Grinds" section of *Technique*. Both the latter publications are now entirely serious in their contents, so that *VooDoo* has the field of humor at Technology to itself. Young Reynolds has been on the staff of *VooDoo* for the past two years. — Brig Allen (Carleton B., Jr.) was elected President of his Class for senior year. He has already served the Class as President for their junior year just ending. This is the most prominent position in the student world, and with the present organization of the undergraduates, is a far more important office than it was in our day.

Classmates will learn with deep regret of the death of Matt Brodie at Tokyo, on March 25. Matt was stricken with appendicitis, and following an operation, peritonitis set in, then pneumonia developed, and in spite of the best attention, he was unable to weather the complications and he died after making a good fight for life for over two weeks. Matt had been connected with the Sullivan Machinery Company ever since graduation and has been far afield so that few of us have had the pleasure of seeing him during his brief visits to this country. He worked for a few months in the shops of the company at Claremont, N. H., getting experience in the manufacturing, then worked on installations for part of a year. Next he went to the Pittsburgh office as a salesman, his territory including West Virginia, Ohio, Western Maryland, and Pennsylvania. In 1905 he became manager of the sales office at Salt Lake City. In 1910 he went to Sydney, Australia, to establish an Australian office for the company. He was next in Petrograd, Russia, during most of the war, and after leaving Russia at the time of the revolution, he went to Tokyo, where he had charge for the Sullivan Machinery of all Asia, which was surely a large territory. His headquarters in Tokyo have been with the Mitsui Corporation, the largest commercial company in Japan. At the time of the great earthquake, Brodie was spending a week-end at a resort some distance from Tokyo and was bathing in a swimming pool when the first shock came. While suffering an exciting experience, he escaped serious injury. The following is quoted from an eulogy delivered at his funeral by one of his Japanese associates: "Undoubtedly he has discharged his duties most faithfully and conscientiously but to say simply that he was helpful in furthering Sullivan Company's influence and in extending Mitsui's activities would be an inadequate statement to do justice to the remarkable merits of the deceased as a man. He was truly a successful business man, and an engineer, a gentleman with admirable traits and praiseworthy qualities, but he was much more — he was an ambassador of commerce, for wherever he went, or whomsoever he came in contact with, he won the confidence and good-will of everyone. He was

1902 Continued

the symbol of good fellowship and geniality, and helped cultivate, unconsciously perhaps, to himself, that necessary good feeling between the peoples of this country and the country he represented, an effort which is too often neglected, even among those more directly concerned, in the turmoil of the present day activities. He was charitable to the needy, generous with his friends. His fondness for children rings true to his sterling qualities, and with his associates he was always tolerant. Such was the man, our beloved friend, the late Matthew Brodie. He has closed his eyes and is with us no more. His flesh is inert and his senses are immune to things earthly. God is merciful. May he rest in peace."

Classmates will all join in this warm tribute and only regret that interests which have kept him so far from most of us, prevented our knowing more of our well beloved classmate in the years since we left Technology. Matt never married. He is survived by his father, Mr. James Brodie of St. Paul. — FREDERICK H. HUNTER, *Secretary*, Box 11, West Roxbury, Mass. BURTON G. PHILBRICK, *Assistant Secretary*, 246 Stuart Street, Boston, Mass.

'03

At this writing, May 18, the plans for our Twenty-Five Year Reunion are actively taking shape, but no attempt will be made to give any details here as it will be past history long before publication.

A newspaper clipping has come to hand giving a picture and description of the new "Film Center" building being erected by Ralph Howes (R. H. Howes Construction Company) in New York. This occupies the block bounded by Forty-Fourth and Forty-Fifth Streets and fronting on Ninth Avenue. It will be fourteen stories high, with 18,000 square feet to each floor and will be equipped with every modern facility for storing and shipping films. — Another clipping explains an elaborate plan for the beautification of Copley Square, Boston, proposed and developed by Edward E. Hoxie. This includes a beautiful "Peace Fountain and Shaft" in the center of the square, an underground Union Station, a municipal auditorium, widening of streets, and other important changes such as the removal of the Copley Plaza Hotel and the Victoria Hotel. Probably several years will elapse before any definite action on plans for the square will take place.

Your Secretary has received new addresses for Ralph B. Yerxa, Robert F. Manahan, John A. McKenna, and William E. Mitchell.

Your Secretary, with this issue, is completing his period of service, and takes this opportunity to thank all those who have given him a lift with his arduous (?) duties, as well as those who intended to and did not. More power to the next incumbent. — C. S. ALDRICH, *Secretary*, 10 Beaufort Road, Jamaica Plain, Mass. GILBERT H. GLEASON, *Assistant Secretary*, 25 Huntington Avenue, Boston, Mass.

'05

"Agua, fuerza motriz y Carreteras que significan millones de dólares, que se han proyectado en México en pocos años atrás," and so on, is from the Mexican *Herald of Tijuana*, B. C., Mexico. An illiter-

ate translation in the same paper reads: "The Garcia dam is causing a lot of comment on both sides of the line. People are commencing to realize this enormous project, which will bring to the Northern district of Baja, California, the greatest prosperity ever known in the western hemisphere. The Mexican *Herald* is being daily haunted with inquiries from people in the United States who are anxious to get the low-down on this mammoth enterprise. We wish to announce that Mr. Harry Nabstedt is the big boss on the job and he will be glad to meet you and give you every bit of information regarding the work now going on. Mr. Nabstedt is a good old New Yorker and knows his onions. He is down at the damsite and it is only eleven miles from Tijuana on the Tecate road. So light up the buggy and have your personal pow-wow with him." For which you are indebted to Ralph Patch.

Herb Wilcox reports that Vitaphone is "going big" and that "prospects are bright of our having a substantial percentage of the entire motion picture industry licensed before the end of the year. Each new producer will probably have its own trade name for its own sound pictures, so that among other things developing from our activities is a whole new nomenclature in the business. I took a swing clear around the country last January and February, visiting Texas, California, Oregon, and Washington." As Vitaphone has now been installed in Middletown, it is evident that most of the country has been movie-toned.

We have at last discovered an '05 son at the Institute. Theodore Green, Jr., is in the Class of 1930 and is living in the dormitories. On good authority his marks are better than his dad got, though he may not be quite as communicative. — The success of Gatewood's new three-blade propellers which were installed on the U.S.S. *Leviathan* in Boston in June, 1927, is so great that a saving of \$15,000 in operating costs is made per round trip, or \$200,000 per year. — We ran into Phil Hinkley in the lobby of the Vanderbilt, New York. There seemed to be some sort of an S. D. Warren Company convention on. — We had a conference one day with Denison, Alumni Secretary, without prearrangement, in a New York elevator. During the twenty-story drop, we got all the latest news from the Institute. — Eugen Kriegsman, who has spent most of his recent years on the Pacific Coast, is reported to have recently had some business in Passaic, N. J.

We admire the highly developed sense of perception exhibited by the Review Editors in their footnotes to the April '05 Notes, but duty forces us to reveal the fact that only a few of the men they actually saw appear in the *Globe* cartoon. We know because we have the original Wallace Goldsmith drawing. We did, certainly, underestimate their penetrative powers. But wouldn't Jim Barnes' political enemies in Louisville be pleased to hear that Jim had once played the part of the hind end of an elephant?

House Beautiful for May, 1928, featured a house in Duxbury by Sid Strickland which, they say, is "as charming as it is simple." Furthermore, as it were, we learn that Sid is doing several buildings for the American College at Beyrouth (Beirut, Bairout, Beyrout) including a chemical laboratory, and he

is trying to sneak from us at Wesleyan all the ideas our people have spent years in developing, which is a regular trick of the architects.

Will Houskeeper wrote in March: "I have finally torn myself loose from the Bell Laboratories after fourteen years. At present I am giving a good imitation of a man who has retired from the active pursuit of his profession. How long it will last I don't know, nor do I care. I'm having a wonderful time now doing all the things I've wanted to do for years. Reading books I never before had time to read, working in my shop in the cellar, photographing everything in sight, smoking (my taste has improved; I used to smoke 2½-cent cigars, now I pay 3 cents), playing with the kids, and so on. The last item explains the need of a vacation. Both Mrs. Houskeeper and I were feeling rather jumpy after the long indoor confinement of the winter, so we decided overnight to get away from the children and have a real vacation by ourselves; hence the trip. And no expense account to be vouchered afterwards. Oh, boy, ain't it a grand and glorious feeling?"

We were surprised to hear that Howard Edmunds was with the Crocker-Wheeler Electric Manufacturing Company at Ampere, N. J. He writes: "I am here as a 'temporary visitor' and how long Uncle Sam will allow me to remain is still an open question. I am engaged in developing a new type of friction speed reducer and increaser which the Crocker-Wheeler Company are taking up. As to photo-sculpture, this is still going on both in New York and London, but the success, if any, is artistic and not commercial. There are many in the Class of '05 that it would be a pleasure to meet again." — Winfred Taylor writes: "The New Jersey Bell Telephone Company is the youngest associate Bell Company. It came into existence last October and operates throughout the State of New Jersey. I am on the appraisal or valuation side of the business with the title of Cost and Inventory Engineer. My headquarters are in Newark, 1060 Broad Street, and I live in Summit."

It becomes our unpleasant duty to record the death of two more members of the Class. Howard Cowper passed away on February 28, and Herman Lackman on March 4. T. Green with whom Cowper had been associated in the Hydro Construction Company, Buffalo, has sent us the following history: "Cowper spent a short time in Maine immediately after graduation and then came home to Buffalo. Billy Gouinlock had got a job with the Standard Steel Company, manufacturers of locomotive driving wheel tires, at Lewistown, Penna., and he succeeded in getting Cowp a job there. Cowp went with them and stayed until 1908 or 1909. He then went with the Rock Island as one of the inspectors of tests, and was located at Chicago.

"In 1909, I went to Chicago, as district branch manager of the Ferro Concrete Construction Company whose home office was in Cincinnati. Shortly after locating in Chicago I needed help and gave Cowp a job. Due to adverse labor conditions, it was decided to close the Chicago office and I went back to Cincinnati in charge of the Engineering Department and Cowp came to Buffalo. He went in to the contracting business with a man by the name of Harry Gail shortly after he got back there. In 1914 I came up and bought

1905 Continued

Gail's interest out and since then Cowp and I have been partners.

"About ten years ago Cowp had a slight stroke and had to slack up in his work. He confined himself to looking after the business end of the work here. He handled the banking, the getting of the contracts, and the purchasing. The rest of the time was spent running around on the jobs. He had a most pleasing personality which was of invaluable service to the company, and in the settlement of disputes he was in a class by himself. The company has had more or less rough riding until about five years ago and, when we were getting into a comfortable position, Cowp died.

"For the last two to three years Cowp has had to take things very easily. Last winter things became very acute and the doctors sent him south hoping that his blood pressure might be relieved somewhat. However, on the morning of February 28, while on the train, he had another shock and passed away.

"Cowper had no children, which I would say was the one thing that he regretted more than anything else, as he was very fond of children. His wife, Louise Wallace Cowper, is still living here in Buffalo. His father, three brothers, and two sisters are also still living."

The following matter concerning Lackman is contained in the resolutions passed by the Technology Club of Cincinnati. "After graduation, he entered the business of the Lackman Brewing Company with his father, in the firm founded by his grandfather. He soon became Secretary-Treasurer of the firm. Later he succeeded his father both as administrator of the Lackman Estate and as director of the Hotel Gibson. He later held the office of Secretary-Treasurer of the Hotel Gibson, and shortly before his death had been made President of the Gibson Realty Company. He was long a member of the Cincinnati Automobile Club and served for several years as one of its directors. In the capacity of Chairman of the Touring Committee and also of the Good Roads Committee he earned an enviable reputation.

"During the war, Mr. Lackman was very active in the Liberty Loan and Red Cross Campaigns, and later, in the work of the Community Chest. In all these he served as team captain and carried his teams over the top. He also served in the Cincinnati Home Guard Regiment, retiring from that organization as First Sergeant of the Glendale Company. He served as vestryman of Grace Episcopal Church, Avondale, in which he and his family were actively interested. He was one of the early members of the Technology Club of Cincinnati, and has served both as its Secretary and later as its President. He is survived by his wife and five children.

"Therefore, Be it resolved, that in the passing of Herman W. Lackman, the Technology Club of Cincinnati has lost a valuable member and friend whose place will never be filled." — ROSWELL DAVIS, Secretary, Wes Station, Middletown, Conn. S. T. STRICKLAND, Assistant Secretary, 20 Newbury Street, Boston, Mass.

'06 To date the Class has not made a creditable showing in the Dormitory Fund Campaign. This is to be regretted after our excellent records in previous campaigns. Agreeing that it has dragged along,

we do not want to emphasize, however, that it is to be continued until our quota of \$20,000 has been raised. The first page of the May Review includes a full page advertisement of an insurance company stating that the Class of 1928 is taking out \$75,000 worth of insurance which will be presented to the Institute at its reunion in 1953. This custom, which has been followed for the past few years, shows what present classes are doing for the Institute. It is also a fact that older classes have made gifts to the Institute on important class anniversaries. Our Twenty-Fifth Anniversary will come in 1931, about three years away. It is the opinion of the Secretaries that we should anticipate this gift by meeting our quota in the Dormitory Fund Campaign. To those who have not subscribed, won't you please make some contribution at once? From our showing in previous campaigns and from our knowledge of the achievements of the members of the Class it is our feeling that 1906 should meet this obligation. Let's put it across now by accepting our individual responsibility and subscribing to the Dormitory Fund.

Referring to classmates who have children in college, we ran across Charlie Mowry a short time ago who informed us that he has a daughter in Wellesley. — The following is taken from the A. S. M. E. News of May 7, 1928: "George E. Learnard, President of the International Combustion Engineering Corporation, 200 Madison Avenue, New York, has announced the resignation of Joseph V. Santry as President of the Combustion Engineering Corporation, an American subsidiary of the International Combustion Engineering Corporation and the election of H. D. Savage, for many years Vice-President, as President."

Professor Locke advises that Ray Barber has been appointed consulting engineer for the North Fork Placers in Trinity County, Calif. Those of us in Boston will recall that Ray lived in North Reading for a while, but apparently the old love for the West was too much for him as a year or so ago he departed for California, and the above news item indicates he is still there.

In a previous issue the Secretary mentioned the fact that some of the classmates have been heard from indirectly through the Secretary's sister in the course of her trip around the world. While in Manila, Miss Kidder was entertained by E. R. Hyde, I, and Paul Mack, I. Ed Hyde is now Dean of the University of Manila. He was married about six years ago and has a four-year-old daughter. Mack is supervising some construction work in connection with the Manila Water Supply. In Calcutta, India, W. R. Hall, I, gave a very enjoyable dinner party. He is with the Standard Oil. Trusting classmates will pardon these references to the Kidder family; it might be added that when my sister planned her trip I wrote to Furer, Hyde and Hall, advising them as to when she expected to be at their respective places. In each case these men extended themselves to make things pleasant. The Secretary surely appreciates their interest and wishes to repeat the point which he has made before; namely, that class associations seem to mean more as we grow older, and it is our belief that this will continue to be the case.

Ned Rowe, who, besides being Assistant

Secretary, is class representative upon the Alumni Council, has been elected a member of the Alumni Association's Executive Committee. — The following is taken from a letter of April 26, from Emil Henius who is President of Moyans, 2127 North Halsted Street, Chicago: "I will surely make every effort possible to join in the 1931 Reunion. I have longed to come to Boston once again, but business has always been in the way. If I have any suggestions to offer for the celebration that is to come off in 1931, I will surely take pleasure in forwarding them to you." — J. W. KIDDER, Secretary, 8 Harrison Avenue, Boston, Mass. E. B. ROWE, Assistant Secretary, 11 Cushing Road, Wellesley, Mass.

'07 Word has been received from Carl Trauerman that he was elected a delegate to the State Democratic Convention of Montana and that at this convention held on May 15, he was elected an alternate to Houston. He and his wife planned to combine the trip to Houston with a visit to the East, taking in Boston and New York.

In the Engineering and Mining Journal of April 28, 1928, appeared the announcement that John C. Kinnear had been appointed general manager of the Nevada Consolidated Copper Company at McGill, Nev., succeeding C. B. Lakeman who resigned recently. Kinnear had been acting as manager since Mr. Lakeman left on a tour of the world about a year ago. The Nevada Consolidated Copper Company is one of the big porphyry mines, and the record which Kinnear has made shows what a Technology man can do through his own efforts. He started originally as a smelter hand and worked up through positions of greater and greater responsibility until he has now finally reached the top.

Again we have to announce the death of one of our classmates. Vernon S. Rood died on May 1, 1928, at Saranac Lake, N. Y., after nearly four years of fighting pulmonary tuberculosis. Bert Bancroft wrote your Secretary on May 16, as follows: "I went up to visit him two or three times and each time found him the best fighter you ever saw in your life. He and Mrs. Rood had a comfortable house and just settled down to the business of making war on this disease, and the last time I saw him, approximately six months ago, I thought he was going to win out, but fate held otherwise."

Rood was a graduate in mining engineering, and from July, 1907, to March 1909, he spent his time getting practical experience with several western metal mines. He occupied various positions with the Utah Apex Mining Company and was manager since 1916, located at Bingham Canyon, Utah, until his illness compelled him to leave. He married Miss Josephine Limbley on February 3, 1920, and his wife survives him. They had no children. The Secretary has written to Mrs. Rood expressing the sympathy of the Class.

A newspaper clipping was received in May announcing the organization of Middleton and Company, Inc., Rockefeller Building, Cleveland, Ohio, by our own Nat Middleton and Clifford P. James. The purpose of the firm is the "handling of the originating and wholesaling of industrial and real estate financing and marketing of investment securities."

1907 Continued

Gilbert Small, of the firm of J. R. Worcester and Company, contractors, 9 Milk Street, Boston, with his wife and children, took a trip to the Pacific Coast last March and April, going by way of the Panama Canal and returning by rail across the continent. Gilbert was hoping to see several '07 men during his travels, but didn't connect very well. He did have lunch with John Thomas, however, in San Francisco, and found him well and prosperous. John is district superintendent for the Pacific Coast for the American Can Company. He has charge of seven factories in California, and seven in the Hawaiian Islands, his business address being Hunter-Dulin Building, San Francisco.

From the Alumni Office two addresses have been received which relocated for us two men who have been lost, as far as the Secretary is concerned, for several years. L. D. Davenport is said to be reached through R-1, Box 423B, Santa Barbara, Calif., and Charles A. Eaton is at 4 No. Carolina Avenue, Atlantic City, N. J. We will write to these men and try to have some news about them for the next Review. James G. Moore is reported to be at 126 First Avenue, Daytona Beach, Fla., and Joseph D. Whittmore is in care of New York Power and Light Corporation, 126 State Street, Albany, N. Y. We'll seek further news from these fellows, too. — BRYANT NICHOLS, *Secretary*, 2 Rowe Street, Auburndale, Mass. HAROLD S. WONSON, *Assistant Secretary*, W. H. McElwain Company, Manchester, N. H.

'08 The fourth and last bi-monthly dinner of the 1927-28 season was held on Tuesday, May 15, at Walker Memorial, the following being present: Beede, Joy, Ames, Lyons, Booth, Mayo, Sewall, Cook, and Carter.

The Twentieth Reunion was held, as you know, at West Bay Inn, Osterville, June 15 to 18, and was a great success as all those members who attended will agree. Complete details of the Reunion will be published in the November issue of *The Review*. — H. L. CARTER, *Secretary*, 185 Franklin Street, Boston, Mass.

'09 It is with somewhat of a feeling of relief that your Secretary composes the class notes for this the last issue of *The Review* for the year. It isn't hard to put the notes together if one has the material, and about the only way in which one can get the material is for you fellows to send it in. Let's start the fall number right with a lot of real live news about the Class. — Remember, Fellows, that next year we are going to have our Twentieth Reunion. If we are to have the record attendance for which we all hope, it is necessary that we have every one's latest address, so that communications will reach each member of the Class. I hope that if you come across a change of address you will send it in to me so that we can start now to bring our address list up to date. That will do two things — it will help to put over the Twentieth Reunion, and incidentally make the class notes in *The Review* all the more interesting.

It would seem desirable to fix the date of the Reunion as far in advance as possible, in

order that those of the Class coming from a distance may make their plans accordingly. June 14 to 17, 1929, has been suggested as a desirable week-end, coinciding with the commencement period at most of the colleges; so keep these dates in mind, and plan to be present for the Twentieth.

Already some of the hotels on the Cape, who have previously entertained some of the Technology classes, have written to the Secretary inquiring about plans for our Reunion, so that it is evident that we should make our reservations early in the fall. If any of you have any suggestions as to where we should go, or what we should do in particular, I should be glad to have you write to me. Perhaps during your travels this summer you may run into a location which you think especially desirable for the Reunion. Please let me know about it.

The 1909 Dormitory Fund is not going very well. Large subscriptions are always welcome, but the Committee would like to see a large percentage of subscribers, even if the individual amounts are relatively smaller. It would seem as if we should be able to supply funds for at least one room. If you have not already subscribed and intend to do so, will you kindly send in your card at once.

George Wallis writes that he has now taken over the supervision of all the eastern branches of The Creamery Package Manufacturing Company, specializing in dairy apparatus and supplies. He also has charge of their export business from the eastern ports. — While at the spring meeting of the American Society of Civil Engineers, Mollie Scharff met Chauncey Crawford who seems to be traveling around the country a great deal, working up railroad, shop, and yard construction projects for his company, The United Engineers and Constructors. Mollie also met Tom Hickerson, who is professor of civil engineering at the University of North Carolina, Chapel Hill, N. C.

Carl Gram was in Boston a few weeks ago, and the Boston crowd took the opportunity of having a class luncheon at the University Club to welcome Carl back to the old home town. Carl has given me a copy of a letter which he has received from Major R. W. Riefkohl, who writes in part: "In May of last year I spent several days in Pittsburgh and had the pleasure of seeing Maurice Scharff and listening to a very interesting talk that he gave at the Pittsburgh Athletic Club to the officers of the Army Industrial College who were passing a few days in the Pittsburgh district. I have been away so much from the east coast since graduating that I have lost touch with our classmates and it is always a pleasure to see any of them and to hear from them."

"I returned to the United States in the latter part of 1924 after a very interesting six-and-a-half-year stay in Europe — that is, France, Germany, Poland, and Italy. At present, and since 1926, I have been in Washington engaged in work in connection with industrial mobilization — actually acting as instructor and executive officer of the Army Industrial College, located in Washington. You are probably familiar with the work that is being done by the Assistant Secretary of War in connection with making plans for the mobilization of industry to meet the war-time needs of the country. Personally I find this

line of endeavor in the military service extremely interesting and I consider it one of the most important steps for the national defense that has ever been taken by the United States. I think that many Technology men are employed in the industries of the country and probably interested in this work of industrial mobilization. We come in contact with them from time to time and it is gratifying to know the spirit of assistance and coöperation that they evidence in their contacts with the War Department. Should you or any other classmate come to Washington on business or pleasure, I would appreciate it very much if I would be advised in order that we might arrange to get together and exchange greetings and experiences."

Royce Gilbert has become a regular public utility magnate as President of the Atlantic Public Service Corporation, the Atlantic Public Utilities Corporation, and various affiliated companies, with ice plants, water power plants, and electric light and power plants scattered all over the eastern part of the country. Royce is of the firm of Chase and Gilbert, Inc., which has just completed the construction of the latest dormitory units for the Institute. The huge Motormart and Bowdoin Square garages and the new Ritz-Carlton Hotel in Boston were also built by this enterprising firm.

The Franklin Baker Company with whom Paul Wiswall has been associated has now joined the Postum family, so that Paul's new address is care of Postum Company, 250 Park Avenue, New York as indicated at the end of these notes.

R. L. Jones is building a house in the Druid Hill section of Summit and expects that it will be completed in the late summer. — John Mills recently presented an address before the Association of Science Teachers of the middle states and Maryland held at Atlantic City. The subject of his address was "Through Electrical Eyes" and was an elementary exposition of the physics and chemistry involved in television.

Lewis Johnson sends in quite a yarn about how he recently came to get a brand new and most gorgeous decoration — to wit, a black eye. I suspect that there is probably more to it than Johnson admits, but anyway he says he soon expects to make a trip to Louisville to attend the graduation of his son Ralph from the Kentucky Military Academy, which is the oldest, and some think the best, private military school in America. I am wondering how many more of us have youngsters graduating from preparatory schools, or even college.

George Haynes remarked the other day that he was going to Poughkeepsie this June to see his daughter, Muriel, graduate from Vassar.

After the lapse of a year, again a member of the Class of 1909 has been chosen as the head of the Technology Clubs Associated. At the annual meeting, held in May at Atlantic City, Maurice R. Scharff was elected President. It was decided to hold the 1929 meeting in Pittsburgh. — A. M. Rosenblatt is in the electrical contracting business in Charleston, W. Va. — CHARLES R. MAIN, *Secretary*, 201 Devonshire Street, Boston, Mass. PAUL M. WISWALL, *Assistant Secretary*, 250 Park Avenue, New York, N. Y. MAURICE R. SCHARFF, *Assistant Secretary*, Farmers Bank Building, Pittsburgh, Penna.

'10 Jack Babcock sends in a clipping from the *Engineering News-Record*: "J. G. Tripp, until recently engineer of construction on the Lake Pleasant Dam, has taken charge of construction on the Coolidge Dam for Atkinson Kier Brothers, Spicer Company, the general contractors. Mr. Tripp is a graduate of the Massachusetts Institute of Technology and has had varied experience on dam construction, having been employed on the Little Rock Dam at Palmdale, Calif., and on the Emigrant Creek Dam at Ashland, Ore." Jack continued: "Phil Burnham, John Ahlers and Carrol Benton wrote me about the dinner to Bill Haugaard at which Smith, Lewis, and Sneddon were also present."

Carrol's letter follows: "I am enclosing a clipping from the New York *Herald-Tribune* of a few weeks ago, regarding the appointment of Bill Haugaard as State Architect of this state. Bill, as you will probably recall, is a 1910 man, and has been in partnership here in New York City for some time with Phil Burnham, also 1910. A couple of weeks ago I attended a testimonial dinner given to Haugaard by some of his friends at the Engineers Club. There must have been in the neighborhood of seventy-five men present including a number of Technology men, among whom there were John Ahlers, Sneddon, Burnham, and myself. We had a very nice and moderately hilarious time. Haugaard has a big job ahead of him, and I fully believe that he will make good. He certainly has a great many friends, and I do not believe that he is the type that will play politics, as so many do who hold such a position."

"I am still with the American Tel. and Tel. Company, doing work of a more or less statistical nature. There is nothing very thrilling to report about it. Occasionally I run into some of the fellows. Rad Preston is located downtown here with Dillon, Read and Company. Nat Seelye is on the floor of the Stock Exchange, and presumably is making lots of money these days. I have run into Bill Orchard once or twice in the last year or two. He is located in Newark, N. J., and living in Maplewood, I believe. McRae, who has made out very well in the telephone business, is now Vice-President and General Manager of our New Jersey Bell Telephone Company. Walter Brownell is with the Dwight P. Robinson Company here in New York City (at least he still was only a short time ago). These are about all of the 1910 men located in New York City whom I have met within the last year or so. I forgot to mention Stein, whom I have seen occasionally. I don't know just what he is doing now." — DUDLEY CLAPP, *Secretary*, 16 Martin Street, Cambridge, Mass.

'11 It has been delightful to learn of the arrival of two more 1911 Juniors since the last notes were published. Mr. and E. L. Woodward of La Grange, Ill., announce the arrival on March 18 of Doris Jean, their third child. Pete Gaillard and his wife of Washington, D. C., were blessed with their third child and first daughter when Monica, Jr., arrived on April 9.

Curiously enough, the figure eleven bobbed up again when we had our spring class get-together at Walker Memorial on April 3

for there were exactly eleven of us at the dinner, as follows: E. J. Batty, II; J. R. Bowman, XI; Art Coupal, II; Obie Clark, II; George Cumings, VI; Ye Sec, VI; Cal Eldred, VI; Jack Herlihy, II; Charlie Linehan, I; Hal Robinson, I; and Frank Wood, II. After dinner eight of us joined in a bowling match in which Wood's Workmen took four points from Bowman's Beaux. Clark had the high single and total with 90 and 254, while Dennie drew the booby with 51 and 197. The scores: Clark 254, Wood 248, Cumings 238, Coupal 228, Total 968. Herlihy 249, Bowman 244, Batty 201, Denison 197, Total 893.

Our Class had a nice representation at the alumni night of Tech Show 1928, "Half a Man," on April 21 with Mr. and Mrs. Joe Fuller, Mr. and Mrs. Phil Kerr, Mr. and Mrs. Tunnie Parker, Mr. and Mrs. Gordon Wilkes, and Dennie. When I got home that evening I told Mrs. Denison, who was a bit ill at the time, that Joe Fuller told me I was looking stouter. "Of course," rejoined friend wife, "you were looking Fuller in the face!"

During the first two weeks in May, I visited some of the clubs in the upper Middle West on the way back from the annual conference of The American Alumni Council at the University of Minnesota. Although there seem to be no classmates in Minneapolis and Milwaukee, I saw Lloyd Cooley, X, and Jim Duffy, VI, in the Windy City. Lloyd is with the Swenson Evaporating Company and Jim with A. E. White and Company. I was sorry to miss Bill West, II; John Wilds, II; and Ed Woodward VI. In Detroit I saw Minot Dennett, II; Ken Greenleaf, VI; Ted Meyer, II; and Bill Salisbury, II; and a fine time was had by all. My last stop was at Toronto, where they are interested in forming a local club. There I saw for the first time since graduation O. H. Shennstone, I, who is superintendent of Massey, Harris Company in that city.

Lishe Fales, II, whom I have reported as being ill, writes that he is now quite recovered and has returned to his assignment at the University of Michigan, Ann Arbor, where he has a piece of work to be completed by July 1 in connection with the Michigan Aeronautics Department's Guggenheim projects. He still makes his headquarters and home in Dayton, Ohio. — Theo J. Lafrenière, XI, who joined us after graduating from Montreal Polytechnic of Montreal University, sent in a dormitory subscription recently and said he is still enjoying immensely his work as a professor at Polytechnic.

H. Rossiter Snyder, IV, has left the insurance business, with which he has been associated in Hartford, and is now with the R. Snyder Publishing Company, Guilford, Conn. — Ted Van Tasel, X, is now at the General Leather Company, Newark, N. J., getting out new sole leather on a larger scale. He reports that prospects look fine.

Our Class seems to be slowly awakening to the importance of contributing to the Alumni Dormitory Fund, but there is still quite a way to go before our Class has its usual fine record. Here is a closing thought, culled from a letter from Bob Stanley, II, Lincoln, N. H., which accompanied his donation to the fund: "I presume that dormitories are much needed — they certainly were back in 1911 — and since Eleven's Secretary is actively behind this movement, I think Eleven ought to get

behind our Secretary so that his Class and our Class will make a good showing." Them's potent words, classmates. Read 'em and wield the pen! — O. B. DENISON, *Secretary*, M. I. T., Cambridge, Mass. JOHN A. HERLIHY, *Assistant Secretary*, 588 Riverside Avenue, Medford, Mass.

'12 With this issue of The Review another Technology year passes into history. Perhaps it's as good a time as any for a little review of our own. But before we start that, let us bring you up to date on the story of our first Class Secretary — Seth H. Seelye. Do you remember that first meeting of the Class of 1912 in Huntington Hall in 1908? Makes you feel old, doesn't it, just to think of it?

Seelye dropped in to pay us a little visit a few weeks ago. Since he left Technology he has done a lot of traveling. Two years were spent with the Panama Government on highway construction, and another year building a railroad in Guatemala for the United Fruit Company. Then a thirst for some more knowledge brought him back to the text books again, this time at the University of Wisconsin, where he added a degree in civil engineering to his other worldly possessions. Followed some time in flood prevention work in Ohio, then fifteen months with the 23d Engineers in the A. E. F. Not content with over a year in France, Seelye went to Haiti after the war as irrigation engineer for the Haitian-American Sugar Company. Since that time, he has been on highway construction and other big engineering jobs in San Domingo, South Carolina, New Jersey, and New York. It was while in South Carolina that he met the lady who is now Mrs. Seth H. Seelye. They were married in 1926. Seelye is now with the Continental Insurance Company, 80 Maiden Lane, New York. His work involves analysis of railroad securities and financial studies. He and his wife live at 40 Locust Hill Avenue, Yonkers, N. Y.

While stopping off in Cincinnati one day this spring we located Bill Schmiedeke, I, by means of the ever-popular telephone directory, and gave him a ring. Unfortunately Bill was laid up with the la grippe at the time so we couldn't see him. He promised to write us a letter, giving the inside dope on his career as chief engineer for the Max Penker and Sons Company, General Contractors, 123 Valencia Avenue, Cincinnati. But up to date, the letter has not come in. How about it, Bill? Have we got to make another trip to Cinci in order to get it?

A few days later we were in Chicago, and ever-hopeful, we called up F. L. Mowry, XI, in order to accept his invitation to visit the famous Chicago Stock Yards, which was in the February Review. But misfortune was on our trail — Mowry was serving on a jury and we couldn't see him.

A little note received from Raymond E. Wilson, II, related that he had been looking over some old photographs in his collection, and had run across interesting views of the Technology Reunion at Nantasket in 1916. He enclosed the collection, among which were recognized maps of Lombard, Wiseman, Robinson and McGrath. And here's an idea. Why not look over your old files, and send in copies of old Technology scenes, reunion

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views, and so on, showing snaps of classmates. We have a scheme to put them to mighty good use.

Edward H. Guilford, VI, Chief Engineer of the Radiore Company, Los Angeles, Calif., was in Boston recently and delivered a lecture at the Institute entitled "A Review of the Application of Electricity Prospecting in Canada by the Radiore Process." From 1917 to 1923 Guilford was in the United States Air Service as communication officer, and since that time has been with the Radiore Company. — E. C. Van Syckel, III, was married on February 14 to Miss Audrey Bain McDougal. They are living at 6 Park Drive, Brookline, Mass. — Rock Comstock, X, is now living at Cranford, N. J. Rock boasts of four children but neglects to specify their age and sex. — The present address of H. B. Davis, III, is The Poplars, Lancaster, N. Y., where we understand he is living the life of a country gentleman.

Justin C. Sanburn, X, chief chemist at the Strathmore Paper Company, whose home address is 49 Florentine Gardens, Springfield, Mass., has just sent in a generous subscription to the Dormitory Fund. He also adds that his wife and one of his children are ill with scarlet fever. — L. C. Troland, VII, is now associated with the Technicolor Motion Picture Corporation, 120 Brookline Avenue, Boston, and reports that his leisure time during the year of 1928 can be expressed as a minus quantity. — M. W. Murray, XII, reports that as Director of Vocational Education in the schools of Newton, Mass., he is kept extremely busy. He can be located at Newtonville during the school year.

Now for a short account of our stewardship. Starting last summer, we undertook a little intensive cultivation of the class notes field, first by some personal contacts and appeals, and second, by a drum fire of heavy correspondence. While a number of classmates seemed too indifferent even to answer a friendly letter, we did get in a fairly good supply of material. Write-ups of the history of classmates have been given you in almost every issue. Mention of numerous others have been made, as information concerning their whereabouts filters into the secretarial offices.

Contributions to the class treasury have been asked, but we can't say that the response has been overwhelming. Only twenty-seven of you are on the Honor Roll of those who have put up one dollar or more. If you other fellows who have been reading these Class Notes from month to month, and we hope enjoying them, want to see the thing continued, and want to help us build a real plan for one bang-up, go-get-em Reunion on our Twentieth Anniversary, then you ought to kick in once in a while with a few francs for secretarial expenses. We don't need or ask very much. One single solitary dollar per year from each member would enable us to put on a Reunion in 1932, that would make history in the annals of Technology.

We cannot close without mentioning, a little sadly, the Dormitory Fund. The Class of 1912 is not the lowest in the list of contributions, but we wish it were a little higher. We are credited with a total of \$650 as of May 23, against a total quota of \$10,000. This amount has been contributed by seventeen men. Will anyone reading this who has not

contributed to date, please send in his bit so that we make at least a creditable showing in point of number.

Our last word as we close the secretarial desk with a bang, for the long summer vacation, is — please take a few minutes off during your vacation, and write to Shep or Mac. — FREDERICK J. SHEPHERD, JR., *Secretary*, 125 Walnut Street, Watertown, Mass. D. J. McGRATH, *Assistant Secretary*, McGraw-Hill Company, 10th Avenue and 36th Street, New York, N. Y.

'13 The tide has turned. The wild waves have thrown up on the Technology shore morsels and fragments of the good ship, *Spirit of 1913* which was lost at sea. Yes, your humble correspondent has received some voluminous letters and messages from classmates who were supposed to be extinct or inmates of the Smithsonian Institution with the *Spirit of St. Louis*. We were wrong, the *Spirit of 1913* is still afloat, listlessly making progress. Mutiny, neglect or dry rot have almost made a wreck of our pride. Now, Henry made a lady out of Lizzie, and with your help we'll rejuvenate the *Spirit of 1913*.

The following members were present at our pre-reunion dinner: Bob Portal, Charlie Thompson, Jerry Fallon, Buttsey Bryant, Wardwell, Fusey Fessenden, and Phil Capen. Many reunion plans were discussed and many innovations were proposed. You men who do not attend will be sadly missed and you will be terribly disappointed that you didn't "reune" at Chatham Bars Inn. It is expected that 100 Iron Men of 1913 will participate.

Ed Gere, a future U. S. General, reports the following: "Your letters on the Class Reunion and Dormitory Fund arrived a couple of days ago. I would like to be able to comply favorably with both, but this time I can promise nothing and can do nothing. This year has been rather heavy and required pretty close attention to the old grindstone. I hope to graduate from the Command and General Staffs School next month. When you consider that forty per cent of the total count of the course is ahead of me, you can see that some close attention to the job is required. I expect to leave here about June 20 when I will be transferred to the Quartermaster's Corps for work in connection with the construction of new barracks and quarters for the army. I have as yet no orders, but have been told that I will probably go to Washington, D. C., in the office of the Quartermaster General. If that is the case, I will have a job to find a place there for my wife and two children that will come within the government allowance for quarters. Rents are rather high in Washington. If I do go East, I will probably hit home (Syracuse) about June 23 so that it looks rather doubtful that I could reach Boston in time for the Reunion.

"As for the fund, I would not dare promise anything now. After I reach my new station I will do what I can. As a bachelor I supported such projects, but with a family it takes a little closer figuring on army pay. As my time is filled for the present, at least, I cannot give the time to rounding up the gang in this territory, so I am returning the cards. I am sorry that this all came at this time for I would like to do what I could to help the good causes. If I can possibly get

to Boston even for part of the show, I'll be there. My regards to all the old crowd; I am with you in spirit at least."

Yours truly sojourned in New York last week and had the pleasure of dining with Joe Strachan at the Engineers Club. As a result, the following letter was received today: "It was good to see you after all these fifteen years, so good that at your request I am breaking my unwritten silence of that long to tell you a bit about those of the Class hereabouts, whose secrets I have at least partially penetrated. I expect you to protect me from libel suits!

"Bunny Brett has stayed right with the Dodge Manufacturing Corporation since graduation and for several years has been their export manager with headquarters on Hudson Street, New York, and his home is in West Englewood, N. J. He has three children now, the youngest a boy. Jack Rankin has been a telephone engineer, lieutenant on the U. S. S. *Seattle* during the late rumpus, in business for himself in Buffalo, and for some years again with the American Tel. and Tel. Co. at 195 Broadway, New York. He apparently cleaned up everything to be done as manager of the department of operating and engineering so has shifted his activities (if any — I've never seen him actually at work) to the commercial department. He and his wife, formerly Connie Flood, live in Port Washington, Long Island, with their two youngsters, both girls.

"Pete Howes started in with the Oil Well Supply Company but had a long, hard fight at Saranac Lake. He's back with that company again, running the Oil City, Penna., end of the business, still taking care of himself. He and I took about a four-weeks trip to the West Indies two years ago, touching most of the islands along the eastern edge of the Caribbean Sea down to Trinidad. Gene Macdonald, after erecting a few bridges for the American Bridge Company (after leaving Spoff's office at the Institute), joined up with the 11th Railway Engineers. His ruse of enlisting failed, though, for he rapidly rose to master engineer, was commissioned and came home a captain. He's back in the bridge game again with Waddell and Hardesty, 150 Broadway, at work on the Staten Island bridges for the Port of New York Authority. In spite of his w. k. temperate habits, Gene is a full member of the A. S. C. E. He lives with his wife and daughter in Passaic, N. J.

"During the war I ran into Bob Nichols at the Bureau of Yards and Docks, Washington, building naval hospitals with Commander Fred Southworth, '00. Bob was luckier than some of us, though, not being in uniform. He didn't have to forfeit his seat and his eternal soul when some admiral hove in sight. Since the Armistice he's married and runs a coal business in Binghamton, N. Y. Fred Murdock tried Hartford Fire Insurance after leaving Spoff and Gene and just before the war went to Buffalo and put Buffalo Weaving and Belting Company on the map. Then he went south and started the Southern Weaving Company at Greenville, S. C., of which he's still President. I believe he's also started a concern making asbestos brake lining.

"Ray Haynes is another wise deserter of the profession for after the war, in which he served with old Squadron A of the New York Guards, he went with Redmond and Com-

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pany, investment bankers, and a couple of years ago was made a partner in Wellington and Company, the stock brokerage branch of Redmond. This past week he bought a seat on the New York Exchange for \$370,000. Not so bad for a civil engineer! He and his wife and daughter divide their time between town and his summer home in Canaan, Conn. Hes Holmes has likewise taken up that game. I think he's with Hornblower and Weeks's New York office. Cadenas has stayed close to the job in his native Havana and unless the administration has since changed, is city engineer of that town, besides running a consulting practice and a contracting business as well. He and his wife visited us in Englewood a year or so ago, while he waited for some local 'politics' to subside. It seems they take their politics rather seriously down there, though not so much so as in Nicaragua, fortunately for Cady.

"Fred Rich is still in the advertising game, lives in Port Washington, and yachts as a diversion. Larry Hart, until recently in charge of eastern sales for Johns-Manville, Inc., has gone into business for himself somewhere in the Middle West and I've lost track of him. We'll miss him at the Engineers Club. Jack Coe has stuck close to the U. S. Rubber Company since graduation, developed the U. S. and British Navy Gas Masks, became assistant director of research, and about a year ago went into the manufacturing end of the business in the Detroit plant. He has a fine boy about fourteen and a girl of nine or ten.

"Bill Leathers called on me recently; he's hooked up with a syndicate headed by Matt Brush which develops and sells promising businesses, such as the Schick Magazine Razor, and so on. Cardinal is still sticking to silk manufacture in Paterson, N. J., under the firm style Cardinal and Becker.

"As I told you, for about four years since leaving the General Chemical Company I've been with Sanderson and Porter, 52 William Street, New York, engaged in examining and reporting upon industrial businesses, a pursuit which as you can imagine doesn't confine one to New York City. Nevertheless, I hope any of the Class who may be in town will look me up if possible. The office telephone is Hanover 5640; the home, Englewood, N. J., 677. Here's to our June Reunion! Best regards to all hands, Phil."

We also have letters from other struggling classmates. The following is from Harold D. Marsh: "Your kind invitation to visit Chatham for the Reunion of 1913 is acknowledged with thanks and I have duly notified the bearers of the names entrusted to my care, the carbon copies enclosed certifying thereto. At this time I do not see my way personally to enjoy this social function, the correlative functions of time and space not permitting. My hearty good wishes for a lively party."

We hear from John L. Kerr, General Electric Company, 230 South Clark Street, Chicago, Ill., as follows: "After an extended absence from the city I find your letter of April 3 concerning the 1913 Class Reunion. It seems to have been my ill fortune ever since leaving Technology to have been unable to attend many Institute functions, as I have generally been far away from Boston at such times as they occur. I had planned on attending the Reunion this June if possible, but now

find that due to the pressure of business I shall be unable to do so. My business address was quite suddenly changed and I am no longer a resident of Boston. I would appreciate it if you would arrange for the class records to be changed, listing my address as given above. I regret my inability to attend but send you my heartiest wishes for a hilarious Reunion."

Frances Stern wrote: "I am always glad to receive notices of the Class of 1913, although I am only a special student and at that a woman. The Reunion at Chatham Bars Inn sounds very fascinating for it is both a delightful place and a charming hotel. I hope you will all have a thrilling time. We are still in need of some money to complete our fund for a bronze bas-relief to the memory of Mrs. Ellen H. Richards and should be very glad if any of the Class are interested to send a contribution. Inasmuch as most of my spare change has gone to women's work in connection with Technology, I am sorry that I can only send a small contribution to the dorms. However, here goes!"

From John Blatchford we have: "Your letter and plans for our Reunion in June sound very fine. I wish it were possible for me to join with you this year as I have looked forward to going back East for a number of years. I am very doubtful about it this year. I want to report that I have made a very promising connection with the Chicago plant of the Imperial Type Metal Company as metallurgist. For the past six years I have been with the American Spiral Pipe Works as designing and plant engineer. My new berth is putting to work some of the Course III rudiments and these have been supplemented by my experience along mechanical lines. My mail address is correct as you have it and the plant is, care of Imperial Type Metal Company, 1800 South 54th Avenue, Cicero, Ill. I am sending in my check to cover the dues."

Hap Peck sidetracked his quest for the almighty dollar long enough to send this newspaper clipping concerning A. H. Means: "The American Smelting and Refining Company has added to its Utah division a mining and geological department with headquarters in this city [Salt Lake City]. A. H. Means, a geologist of wide experience, is in charge and states that the function of the new department will be to assist shippers of the intermountain area, advise them as to their problems in relation to the treatment of their ores, and to investigate mining properties that are brought to the company's attention. . . ."

Newt Eichorn sailed for Europe on May 3 and expected to return some time the first part of June. He writes that Fiske Jones who is now with the Simonds Saw and Steel Company, Fitchburg, will be with us at Chatham and will conduct classes for all talented classmates on the musical saw. — G. R. Pardey has joined the immortals in New York but is still with Westinghouse Electric Company. — Dave Mason still razzes our meagre efforts in his usual manner from the Witch City. — Van Van Dusen, our most illustrious grocer of Hudson, N. Y., admits he is the world's worst collector, but still has a kick left for the Dormitory Drive. — Jimmy Beale, the Gene Tunney of our Class, has actually started training for another bout at the Reunion. —

Norm Clark has located in Philmont, N. Y., but would give a year of his life to be back in Boston. He has had considerable interesting experience in the specialty paper business, has manufactured imitation leather and at present is manufacturing stove polish, nickel polish, glues, cements, stove-pipe enamel, gold and silver paints, with the Dooley Manufacturing Company at Philmont, N. Y.

The Dormitory Fund is increasing daily, but we need everybody's assistance in this worthy project. Let's help repay in part the great debt we, as appreciative Alumni, owe our Alma Mater. Your Scribe wishes to thank all and every one of the classmates who have helped with the Reunion and Dormitory Drive. Keep up the good work. Send in all news of yourself or any other classmate. Send anything, but write. One hundred and nineteen classmates have communicated with this office in some form or other and we appreciate their efforts and answers to our various appeals.

We were very sorry to hear that Walt Muther had been laid up as the result of a tonsil operation. We just learned by phone that he is up and around and speedily recovering. Ask Walt if two operations are cheaper than one. — George A. Dempsey left for California on May 20 from Jamaica, West Indies. — Bill Mattson, our illustrious Class President and Beau Brummel, was seen in Minneapolis recently. — A. D. Conant advised us that due to ill health he cannot "reune" this year. Here's wishing you a speedy return to good health, Al. — William C. Purdy has informed us he cannot join this year as he has lately purchased a house. Good luck! Let's in on the housewarming. Bill may be reached at Cincinnati, Stream Pollution Investigations (Aha! He's a fisherman), U. S. Public Health Service. — Last, but not least, our old joy maker and fellow worker, Stan Parker, has departed from our midst to represent his concern, Wheelock, Lovejoy and Company, in Chicago. Best of luck, Stan, what is our loss is Chicago's gain.

Well, mates, heave to. Let's start our *Spirit of 1913* away under full sail for the year 1928-29. Can we count on you? — HARRY D. PECK, *Secretary*, 1123 Hospital Trust Building, Providence, R. I. G. P. CAPEN, *Assistant Secretary*, 25 Beaumont Street, Canton, Mass.

'14 As these notes are being written, your Secretary cannot help letting his thoughts drift away — a year hence.

Just a year from now we will be together for what is usually considered the best of all reunions. Out long enough to appreciate a few days of renewed acquaintance, and yet young enough to enjoy being carefree. Let us all plan this Reunion together. Listen!

Your Secretary is not the one to say what is to be done or where we go. He is only your chauffeur. It is his desire to carry out the collective wishes of the Class. He will hold the Reunion on the driest hilltop or the wettest spot on the shore — just as the Class desires. He refuses, however, to go submarine diving without his own private rowboat. It would be most helpful if every member of the Class would drop the President, Secretary, or Assistant Secretary a note giving his ideas of just how he would like to have the Reunion

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run. Here is as far as plans have matured. The Reunion will be over a week-end at some spot about half way between New York and Boston; it will be stag; there will be general sports, as well as golf and tennis; a lighthouse will be provided for Jimmy Judge to serenade; and Charlie Fiske will provide automobiles for Chet Ober to bump into; total cost with all extras, but not including transportation, not to exceed \$30. Now let's hear what you think of this program, and start your dollar-a-week savings club now.

The Alumni Dormitory Fund campaign has been very active during the spring months. Every hope is expressed that the campaign may be closed on July 1. It is needless to say that your Secretary and his co-workers hope so. E. D. Haywood, in sending in his pledge, accompanied it with a splendid thought. He wrote: "I am now the proud possessor of a son, Daniel Abbott, one year old, and I want to be sure that he has a chance, at least, to live in a 1914 room in the dormitory at Technology when he becomes of age. Hall bedroom on St. Botolph Street served their purpose when I was there, but the prospectus of the new dormitories sure looks good to me."

It is not a pleasant task for a Class Secretary to solicit funds from his Class, even for so worthy a cause as the dormitories, but it does help when every one takes hold. H. S. Wilkins has been of great assistance in putting across our share of the campaign. Others, too, have been very helpful and your Secretary desires to acknowledge his indebtedness to every one of you who has assisted in this work. It is too early yet to report how much we raised. From present prospects we will not reach our four room (\$10,000) goal. The most disappointing note has been the small number of contributors. The amounts have been generous. It is particularly desired to have as many of the Class participate in this fund as possible. If you have not contributed because you felt you could not give a substantial amount, do not stay off the list. Send five or ten dollars so that our class list will be representative. No amounts will be published.

Haywood, referred to above, has been out on the Pacific Coast for several years with the Charles E. Bedoux Company making efficiency studies. Another man on the Coast is Henry L. Gardner. Gardner has forsaken the radio game — thus showing great intelligence — and is now with the Doheny Stone Drill Company, of which E. L. Doheny is President. Henry writes that the company manufactures drilling equipment, rather than doing the actual oil drilling itself. He writes that the company has several unique advance designs in drilling equipment. Perhaps 1914 might rent some equipment and go on a private oil hunting party all its own. No doubt Professor L. W. Currier, our noted class geologist, could pilot the expedition. Incidentally, Currier is transferring to Purdue University next fall as Professor of Geology.

Now that we have got as far east as Purdue in Indiana, let us stop at Akron, Ohio, and see Walter Keith. Walt has stuck with the rubber game since graduation, and although originally with Goodyear, is now associated with Mr. Seiberling in the Seiberling Rubber Company. Walt expresses a desire to see any Fourteeners passing his way. With the present condition of the rubber market, it is a

good bet that Walt could fix up any visiting Fourteener with "factory seconds" at suitable prices. If in doubt as to the quality of Keith's tires, just take them over to Ray Dinsmore at the Goodyear plant. Ray is chief chemist there, and it would be interesting to see what Ray and Walt would have to say about each other's products. We will try to have a decision bout on the matter at the Reunion next year.

Roy Parsell, who is with the Winchester Company at New Haven, is making a strong appeal to hold our Reunion there, but there is great doubt in your Secretary's mind as to how Yale and Technology would mix. Enumerate your claims, Roy, and if they are strong enough, a committee will appear to sample them.

After eight years in St. Louis — with apologies to Phil Morrill and Lindbergh — Whew! Bill Simpson has returned East. He is now in the research department of Charles Pfizer and Company of Brooklyn. Bill has followed organic chemistry and in spite of his long stay in St. Louis, reports that he has also toiled once in Connecticut, and twice each in New York and New Jersey.

E. C. Wenthe has been much in the scientific public eye of late. *Science* recently contained a summary of his work on multiple layered walls as sound absorbers. Wenthe's particular contribution to the art has been in the devising of a new test method whereby only small samples are necessary, instead of the full size formerly required. To those Fourteeners whose neighbors already have troublesome loudspeakers, Wenthe's other development will not have great appeal. It is a method whereby the volume reproduction of loudspeakers may be extended 300 times over previous known methods. It consists in a greater efficiency of electrical to mechanical transformation, and also of greater energy utilization. With the new speaker, it is possible to talk across the Hudson River at New York City.

Paul Taylor, who recently slipped over to New York from Boston, now officially appears as Secretary of White and Parton, Inc., advertising and merchandising counselors. Listen to this. Paul writes: "Our work is very largely upon chain store distribution and the integration of industrial merchandising and financial units."

Walter Eberhard has joined the élite as the proud father of three children. Jean Douglas arrived on January 11, but Walter's modesty prevented him from sending in a report until the young lady was four months old. Just as hearty congratulations are in order, even if late. — Dave Sutherland has forsaken heavy engineering and is in the automotive field at Minneapolis, where he is northwest distributor for Panyard Piston Rings.

The host of friends of Pat Adams will be happy to know that after a rather severe illness Pat is around again in his usual genial, energetic manner. He has been going around the country attending various aeronautical events. We find him at Washington welcoming the Bremen fliers, at Pittsburgh attending the Balloon Race, at Chicago, at Wichita, Kans., and then dedicating an airport at Lowell, Mass. No wonder Pat needs an occasional rest! — H. B. RICHMOND, *Secretary*, 100 Gray Street, Arlington, Mass. G. K. PERLEY, *Assistant Secretary*, 21 Vista Way, Port Washington, L. I., N. Y.

'15

The long distance prize surely goes to Douglas Baker for his letter of March 6 on the stationery of "Standard Eléctrica, S. A.," Madrid, Spain. He surely tells us a lot of interesting things about himself, his family and his work. "Enclosed find a check towards the Dormitory Fund of 1915. I have been afraid to send in a pledge card, because as you see from the length of time it has taken me to write, it might have taken another five-year reunion to wake me up to the point of redeeming it. Your good work in getting out 1915 class news has been such a strong monthly reminder, however, that at last I am coming across with a small contribution, as well as this word of my whereabouts."

"Standard Eléctrica, S. A., the manufacturing associate of the International Telephone and Telegraph Corporation in Spain, is now a lusty infant in its third year. We have a finely equipped telephone cable factory in Santander, and have just inaugurated a telephone apparatus factory in Madrid. My official costume for such occasions, of morning coat, and so on, can now be laid away in moth-balls for a few months. Telephone development in Spain is proceeding so vigorously that there is every reason to suppose that both factories will be kept busy."

"I do not see many Technology men here, although scattered about Spain there are some twelve or fifteen. Jere Daniel, '97, is the one I see most. In addition there are two or three youngsters here of the classes from 1922 onwards. As we are all engaged more or less in pioneer jobs which take all our time as well as our interest, we do not have many opportunities of getting together. There are enough Americans in Madrid to have an American Club whose principal activity is to get together once a month for a luncheon. This sounds like small-town stuff, and in a way it is, because while each of us has his own interests and activities which go beyond the confines of nationality, yet so far as activities among English-speaking foreigners are concerned we do resemble a small town in a way."

"There is little news to report about my family — three youngsters now six, five and three years old, and flourishing. They show up their mother and father, particularly the latter, when it comes to speaking Spanish, but I am still able to speak English without an accent, and therefore retain some vestige of authority."

"I spent a busy six weeks last spring in the States. It was the first visit for seven years, not because I was scheduled for that stay when I came here, but largely because the Company left me to take the trip when I felt like it, and as a result it always seemed difficult to get away. I hope to get back again in 1930, however, and am looking forward to the Reunion which most of you have not begun to think about as yet."

Phil Alger's letter is a corker. I envy him his descriptive style of writing, which makes his letter so interesting. Thank you for the closing paragraph, Phil. It's letters like yours that make my job pleasant and these notes of interest to all our classmates. Phil wrote from 1758 Wendell Avenue, Schenectady, on March 31. There must be a telepathic reaction through the column for his letter mentioning Doug Baker reached me on the same day with Baker's letter. "For many weeks

1915 Continued

I've been about to write you and the arrival of the April Review with its account of the New York 1915 dinner, coincident with the departure of my wife for the evening, has finally precipitated my intentions. My *Tech-nique* for 1916 has shown me the faces of ten and the autographs of six of the twelve Fifteeners at the dinner, the sight of which has renewed old memories. I was in New York only five days earlier and could almost have attended, so let me know next time you plan a party. I only remember seeing three of the twelve since graduation, but I remember you, Piza and Tobey very well from days at Technology. Daley I met in Pittsburgh or some outlandish place several years ago, and I'm glad to hear from him again. King has the same middle name as I, so we're really well acquainted.

"As many of you know, I married Professor Dugald C. Jackson's daughter in 1918 (she has just returned from the play and is telling me all about it), and we have two girls and two boys, all of whom we find most entertaining. Since the war we have lived in Schenectady, where I have assiduously designed a.c. machines for the General Electric Company. We built a green house with a twenty-mile view and a fifty-mile breeze in 1924 and we hope in time to establish a garden. C. W. Noyes and I are the only Fifteeners among about a hundred Technology men in this vicinity. If any of you visit Schenectady be sure and look us up.

"I've found my acquaintanceship with a.c. machines very entertaining. Like sheep, they all have distinct personalities when you learn to know them. The washing machine motor and his cousin, the refrigerator motor, are, like the dog and cat, good household pets and likely to be noisy unless well trained. The turbo-alternator and the hydro-generator are the whale and the elephant of the electric family, the former being warm blooded though bathed in coolness and the latter being generally very slow but equally effective. One of the most interesting projects on which I've recently assisted is the Conowingo hydro-electric project, for which we built four very large waterwheel generators. I'm glad to say that they seem to be performing very well since their entry into service on March 1.

"Last fall I journeyed to the Pacific Coast by way of the Union Pacific, and returned by way of the Great Northern. Henning J. Berg, II, entertained me most pleasantly at dinner at his home, 1840 Van Ness Avenue, San Francisco. He is still a white-haired bachelor as he was at Technology. During the war he earned his aviator's wings and his squadron was stationed for a time at Aberdeen Proving grounds, where I, too, was located. Since the war he has been with the Standard Oil Company. Earle Brown, VI, is with the telephone company in San Francisco, but I did not see him on my trip, I regret to say. Douglas Baker, VI, has a charming wife, three children, and a most high sounding title as a telephone engineer, with all of Spain for his domain. I hear occasionally of Easty Weaver and Arthur Ball, and I meet Alan Dana quite frequently and H. L. Marion occasionally in New York. I hope my contribution to your news will spur others to do likewise, as your most interesting notes deserve support from all of us."

Each of these fellows sent a generous check

for the dormitory fund. Why don't more of you? Thank you both for your letters and for your checks. Under the organizing genius of Rusty White, '16, the Class has been divided into geographical divisions of ten men each. In each group a "key" man was appointed to solicit the others. I hope you will respond to your fine combing. We need your support. The results are discussed at a fortnightly dinner in Walker, where our Class meets with the group of 1911-1922. During my absence from Boston, Jack Dalton has kindly been subbing for me at these meetings. I hope we can put this over for 1915. At one time we were heading this group with the highest total donations and highest average donations per member of the Class. Keep up the good work. Where are the checks promised me by some of the fellows I have recently seen personally?

Would you say that the following wrong men have gone good? There are only a few of us left! From Pittsburgh: Dr. and Mrs. William Firm announce the marriage of their sister, Mrs. Merrette Crozer Abel, to Elbridge Johnson Casselman. From Melrose: Mr. and Mrs. Benjamin F. Kohler announce the marriage of their daughter, Edith Margaret, to Joseph F. Phelan. One by one they fall. This must be the danger age unless there is some truth to the old leap year yarn, especially where these two confirmed (apparently) bachelors are concerned. — In Boston recently I saw such old standbys as Mitch Kaufman, Frank Scully, Max Woythaler who has an attractive and interesting six-year-old son, Jack Dalton, and Clive Lacey. All happy, successful and healthy.

Aha! from out of the West comes Jerry Coldwell with his usual good humor. Jerry wrote on April 19 from Aurora, Ill.: "I meant to have written you before this, thanking you for the class addresses. I have them with me at the present time, but the town of Aurora (it may even be a city, who knows?) did not appear to be listed. I was in Boston for a few days about a month ago and managed to work in a dinner with Clive Lacey. I called our ex-secretary, Frank Scully, but was not in town long enough to even see him. In Detroit two weeks ago I saw Chuck Loomis, '16, several times and had dinner with him once. I hope to have a little time at home when I get this job out of the way but you never can tell as I was only home two days between the last two jobs. After looking over the list, I should say that a trip out to the Coast might be a good thing. Many of the Class seem to think that that part of the country is not so bad."

Who knows? The way Jerry is running around the country he must have roller skates or a plane and maybe he'll give our boys out on the Coast a good visit. — Do you remember Pat Earley, of freshman show fame? Officially he is Preston H. Earley, associated with Harper Brothers, the publishers in New York. I met him in Oshkosh, Wis., recently and recognized him at once. He hasn't changed. He sends his regards to every one. — Allen Abrams and Joe Livermore have written me about their activities on the Dormitory Fund.

Evers Burner writes from the Department of Naval Architecture at the Institute: "Your letter received drafting me among some of the others for dunning 1915 men for the Dormitory Fund. Better not let the Pacifist Societies get hold of you for running a non-selective

draft (only graduates who are salesmen or in the insurance business should qualify for this work). However, I have listened to your command and have written the men in my group and called them up by telephone afterwards. One of the men, Malcolm Thompson, has only taken a few courses at the Institute, and graduated from Harvard. In fact, he took no examinations I understand at the Institute.

"Waters wanted me to say that he sympathizes with the efforts of the men in this drive, and would forward a pledge shortly. Similar replies were made by Chellman, also Archy Morrison. I doubt whether I will be able to get in touch with Berger or Carr except by letter as they live out of town. However, I wrote them stating that I had seen the Dorms and was sure they would be most useful in promoting class spirit and enabling students residing near the Institute to have favorable and sanitary surroundings. I enclosed pledge cards with all my letters so undoubtedly the Alumni Association will shortly receive word from these boys."

You've all been kind to help me and I thank all you "key" men very much. To those two newly married men, Joe Phelan the ball player, and Casselman the chemist, the congratulations of the Class.

Lo! From o'er the seas! Lobbie Lobdell, '17 (thanks to him), sends in the following: "I have just received a letter from McEney Werlich, who has been at the United States Legation at Riga. He had expected to return to the United States for a two-months leave and had come as far as Paris when he received telegraphic orders from Washington that he report at once to the Legation at Warsaw. He continues: 'So I sent my family on to Washington, went back to Riga, closed up my apartment there, and came down here by motor. I have the glorious title of Third Secretary of the Legation. I wish you had seen me negotiate those 424 miles in the car. Stuck in the snow twice and the last time six men, two horses and a lumber yard of planks finally got the dear old Studebaker out. This post is interesting, and I celebrated St. Patrick's Day by finding a place to live in — a very tiny apartment which makes me regret that I did not serve in the Navy so as to learn how to stow things away in the least possible space.'"

And now, Fellows, there comes to a close a pleasant year of our class notes and associations. Thirteen years out of the Institute this summer — a long time but with many years more ahead. May each of these approaching years bring us all closer together, help us to know and enjoy one another better, continue a loyal and interesting class spirit, increase our high esteem and loving regard for the Institute. Many thanks to you all for helping me. I appreciate your spirit a great deal. My best wishes to everyone for a pleasant and enjoyable summer and remember we shall need notes and news of that summer for the opening number next fall. Good-bye, Fellows! — AZEL W. MACK, *Secretary*, 377 Marlboro Street, Boston, Mass.

'16

No notes have been received by The Review Editors from the Secretaries of this Class for inclusion in the July issue. The Secretary received the usual notification that copy was due, accompanied by

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such news as had been compiled in The Review Office. Members of the Class having news or inquiries should address them to RUSSELL H. WHITE, *Secretary*, Kardex-Rand Sales Corp., 118 Federal Street, Boston, Mass., or to CHARLES W. LOOMIS, *Assistant Secretary*, 7338 Woodward Avenue, Detroit, Mich.

'17 It is our sad duty to record the death of another classmate, for Edgerton G. Polley, II, died on January 22, 1928.

Details are lacking: the last time Ed called he was in reasonably good health and apparently entirely recovered from the long siege of illness that had compelled him to give up his very successful work in the public utility power engineering field in Pittsburgh. More recently he had worked with the Hood Rubber Company and then with a consulting engineer in Westboro, Mass.

The engagement is announced of Miss Laura Edna Foye and Atwood Packard Dunham. Nig Sewall was exceedingly shocked to hear of Mac's downfall and what he will say when he learns of Brick Dunham's following suit, will probably not be printable. Just listen to him. "And about Mac. I am sorry to see one of the best of us single devils leaving the fold, but I suppose we will all fall sometime. However, I doubt if the girl really realized how damned fortunate she is in getting Mac."

H. N. Sandell has received free advertising from the weekly publication of the Cambridge Industrial Association. "Come in and see our office floor. Travers-Sandell certainly have done a wonderful job on our office floor. The office is again open and members are urged to come and see our splendid headquarters. Next week there will be a word to say about the floor, for it is anticipated that at least two dozen of our members will want one just like it." If anyone east of Neal Tourtellotte's territory wants a floor, write Travers-Sandell, Kendall Square, Cambridge.

Upon the cessation of hostilities a decade ago, two members of the Class identified themselves with journalistic enterprises. One did it as a side line, while the other barged in with all feet on the ground. The former, Dud Bell, somehow acquired certain rights in connection with an alleged pseudo-politico organ down in Mr. Vare's section of Pennsylvania. At this writing it is unknown whether Dud's output of hammocks and towels has so circumscribed his activities as to justify his being now considered only as quondam member of the Fourth Estate. Added to this possibility the recent lack of news from Philadelphia and the shock of the report on his fellow townsman, L. L. McGrady, in the May Review make it necessary that further data be sought before taking up in detail whether or not Dud still bathes his digits in printer's ink or not.

However, Lin Noys of *Technology Monthly* memories (tender and the reverse) is, has been, and we hope will long continue as a recognized member of the craft. Seekers after minutiae will have noticed that in the Register of Former Students for 1920 he was ticketed as assistant business manager of the Globe Publishing Company of Ironwood, Mich., and that in the more recent edition of 1925 his rise to general manager was recorded. Just what post delvers into the 1930 book

will find him occupying is uncertain, but, according to his own modest statement, made during a recent call at the Institute — his first since the war — his company now operates three dailies on the upper peninsula of Michigan, and soon may have some more. In fact, one might justifiably gather from the aroma of prosperity Lin exuded that the Globe Publishing Company might soon become an Associated Press all in itself.

Just what use a degree in architecture has been to him was not discussed. Nor, for that matter, whether the *Technology Monthly* experience had helped. But the fact is that it was a treat to see Lin again and to feel that one more section of the Middle West is receiving the inestimable benefit of Back Bay literary influences.

The best comment on the series of Dormitory Fund Drive letters came in from Walt Beadle. It was not entirely flattering, but since no one in 1917 had much to do with the preparation of the letters, his comments were amusing as well as interesting. Then he goes on to say: "On May 1, I left Mitten Management to enter the development department of E. I. du Pont de Nemours and Company. I am commuting to Wilmington until we can sell our house. I had luncheon with Jeff Tutein in New York recently. Jeff is still in the pig iron and coke business and seems as prosperous as ever."

I ran across Johnny Holton on the train a few weeks ago, and we dined together. Johnny has charge of research for York Manufacturing Company, I believe it is, at Norristown, Penna. — Art Miller showed up at a Philadelphia Technology Club dinner the other day. He is with General Chemical Company at Marcus Hook and living in Wilmington. — The Class Prince has been ill. Prince Mahidol Songkla of Siam, half brother of the present King of Siam, was confined to the Symmes Arlington Hospital recently by a serious attack of the grippe.

Ras Senter is now President of the Dallas Petroleum Company with offices in the Republic Bank Building, Dallas, Texas. He spends most of his time in the field acquiring and building up producing properties and sees bright prospects ahead of him for the future.

Joe Gargan has reorganized his shoe business at Peabody, Mass., and is now operating as the Warren Shoe Company. Warren Tapley is with the Stetson Shoe Company at South Weymouth, Mass. Another '17 man who has descended into the shoe business is Bob Erb, who is moving up in the J. F. McElwain Company, and who now spends Wednesdays and Saturdays in Boston. His company is making over 16,000 pairs of shoes a day, and expects to start another unit with a capacity of 5,000 pairs in the near future.

Louis Wyman is spending much of his time in Maine getting two of the William Underwood Company's plants ready for summer operations. Just which one packs the little red devils into the deviled ham, he does not say; evidently they are caught during the summer.

Indirectly Ted Haviland is reported to be alive and kicking with the Dolphin Jute Mills at Paterson, N. J. He is associated there with S. Wells Wilder, '06. Frank Butterworth paused recently on his way to Nashua and points north.

Heggie recently addressed the Technology Club of Western Pennsylvania and Lobdell the Technology Club of Rhode Island. The secretaries of both of these clubs are '17 men, J. C. Whetzel and W. C. Wood, respectively. The latter is planning his summer yachting season, and has now forsaken pearl diving and acquired a professional deep sea rating. He is mixed up in the supply of hardware for sailing yachts and power boats.

Ed Warner landed on the Basin in a seaplane on June 4 to attend the Dedication of the new Aeronautical Building. Heggie also attended the ceremony. Rumors have it that with the wane of the Coolidge administration Ed will be back at the Institute with all hands and both feet next winter. His Course XVI now has forty-six per cent of all the aeronautical engineering students in the United States. Consequently, having fixed up the Navy, he is due to return to Cambridge and the simple life. — RAYMOND S. STEVENS, *Secretary*, 30 Charles River Road, Cambridge, Mass.

'18 Here we are at the last issue of The Review for this year. These notes have to go in a whole month before Reunion time comes so all we can do is to try and fill things up with news. For those who are not getting to the Reunion I will give a general outline of our plans. Those who are getting there will have had their good time before they see this in print.

Friday afternoon we are arriving at Weekapaug Inn, Weekapaug, R. I., about seven miles south of Westerly, on a strip of land with surf bathing in front of the Inn and a three mile fresh water pond in back. This will give us ample opportunity for water sports of all kinds. There are sail boats, row boats, and canoes on the pond, and bathing facilities in the sea. There are tennis courts on the Inn property and golf links only about two miles away. After dinner on the first evening we will have dancing for those who want it, cards, movies of Technology, and last, but not least, an hour of fireworks out on the beach. This will all be finished up by a midnight spread to which all present must come.

Saturday morning we start off the morning with a baseball game between New York and Boston, followed by a swim and a regular old fashioned clam bake in the sand. In the afternoon a tennis and golf tournament will be run off for the fellows, and the wives will have a bridge party of their own. That evening will have in store for us the regular dinner of the Reunion, with no outside speakers, followed by another midnight spread for those who want it. Sunday morning will be filled with water sports and races for all present. Following our noon meal that day we will depart for our homes wishing that those days could have been longer.

In the first issue in the fall will be the full account of the Reunion. I won't say that it will be hour by hour, but I will promise to have as full an account as I can possibly give. Watch for the November issue.

I feel sure that 1918 is going to lead the list in the number of births being registered in this issue. Douglas Lee Miller arrived at the home of Ray Miller and his wife on May 3. A son arrived at the home of Tom Fogarty

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and his wife in Plymouth on March 9. A daughter, Alice, arrived at the home of Saxton Fletcher and his wife around the first of February. Another, which is rather slow in being announced because the fond father is slightly bashful, is young Bobbie Dow, son of Charlie Dow and his wife. Bobbie is now a year and a half old, and, from what I understand, is very much of a prize package. To these fond parents go the congratulations of the Class.

I dropped a line to Sax Fletcher about some work on the Dormitory Fund Committee work, and the following is a part of the letter I received in answer: "Now that you have forced me to write a letter, I am going to take this opportunity to give you a little dope on what has happened to me since I left the Institute. As you probably all know, I was married in the early part of 1923, and I have been living here in White Plains ever since. We have two children, Sax Junior, nearly three years old, and Alice, nearly three months old. As some people say, a real American family. They are all well and happy, thank you.

"My business activities can be outlined rather briefly, as I have been with only two concerns since I came to New York in 1919. At that time I started work with W. L. Fleisher and Company (now the Cooling and Air Conditioning Corporation), in the engineering department, specializing in air conditioning, and gradually I worked into the selling end of the business. I stayed with them until the summer of 1923 when I joined my present company. This is the J. O. Ross Engineering Corporation, 30 East 42d Street, New York, which specializes in heating, ventilating, drying, and air conditioning systems for the paper industries. Our company also owns the John Waldron Corporation which manufactures special machinery of all kinds for converting paper. This takes in a rather large field when you stop to think of wall paper, gummed paper, paper napkins, paper shingles, linoleum, congoeum, and numerous other products. My work consists of making myself useful in about everything connected with our organizations, engineering, purchasing, selling, and being Secretary of the company. It keeps me busy, particularly as this is our busy season."

Thanks a lot, Sax, for the letter. It is letters like this that help to fill up the gap between 1917 and 1919 — a gap that we do not want to see empty. I hope we see you and your wife at Reunion.

A letter came to me from Arthur Williams who was with Course V for one year. No one had heard from him until this time. "Of my past since leaving Technology, there is little of importance. I spent two and a half years as an aviator during the war, then taught in various colleges for five years, then wasted three years in business, losing all I had made, getting experience. I have been married ten years and have two daughters, of eight and nine years, and two sons, aged three and five. You see I have not altogether wasted my time. I am still after an elusive and much needed Ph.D. and I am in hopes that it will arrive next year. Then I will be able to get down to work in earnest." This letter of Arthur's was written from New York University where he is teaching and working for his degree. He

may succeed in getting to Reunion. We all hope so, anyway.

A letter came in from Dick Wilkins who has been doing some work on the Dormitory Fund drive in which he says in part: "Unfortunately I know only one of the victims on my list personally. I just called him up. He is John R. Fuller who is purchasing agent for the Hygrade Lamp Company. Fuller used to be a regular guy, but now he is a purchasing agent. I would say off hand that the chances of talking a donation out of him are almost nil. Any company would fire a purchasing agent if he could be talked into parting with cash in that manner.

"I was greatly interested in Bill Turner's letter in The Review. I haven't seen Bill since we were in school, and I am awfully sorry to hear that he is in Akron. I have had to go there once or twice, but I always drove up to Cleveland to spend the night. Twenty-four hours spent continuously in Akron might leave a scar on a man's soul that time would never eradicate." Probably Bill and George Sackett do not feel the same way about it that Dick does.

In the Boston *Evening Transcript* on May 22 was the notice of the sudden death of one of our classmates, George R. Martin, III. George was with us for two years and then he left school when the war came. A letter of sympathy from the Class has been sent to his widow who is left with two small children.

I have said in the first of these notes that I felt sure that 1918 would lead in the number of birth announcements for this month, and now I am sure of the fact. Just as I was writing these notes a letter arrived from Alan B. Sanger announcing the arrival of a daughter, Marcia, born May 15. Congratulations, Alan.

Just because there will be news of the Reunion for the first issue of The Review in the fall, please do not go back on me. Send me in any news of what you are doing during vacation, even if it is only a few lines on a postal. — Now as to the drive for the Dormitory Fund. I want to thank all the fellows of the Class who are helping me with this. I know there are many who are too busy and have too much else to do to help with it. I understand this fully, and I sincerely thank them for letting me know of this so quickly. I am not trying to push this thing too hard as I know that 1918 men are many of them in a rather crucial position financially just at this time. Money is not coming in very fast, but we are holding our own as to the average amount per subscription. The latest figures to May 23 were ten subscribers with a total of \$305 subscribed.

Please remember this, fellows, it doesn't mean that you have to send a check immediately. You can make a pledge and pay within the next two years. The pledge doesn't have to be very large. The main point is to give something. I would rather see the number of subscriptions rise and the average drop than to have a small number of subscriptions. The closing date for the drive is July 1 so you have only a day or two to send in a subscription or fill out a pledge card. We are counting on you to help us along.

To all those whom I shall not see at Reunion, let me say now that I hope you have a very pleasant summer. — GRETCHEN A. PALMER, *Secretary*, 148 State Street, Boston, Mass.

'19 A very interesting letter has been received from Don Way, the gist of which follows: On March 20, fifteen members of the Class met at the Technology Club of New York and had a dinner, followed by an informal meeting at which there was a discussion regarding the Ten-Year Reunion to be held in June, 1929. Oscar Mayer suggested that all of those present write something to be put in The Review.

Here is what those present have to say: Henry L. Cassidy is married and has two children, only one of which can be considered a future Technology student as he is not entirely in favor of co-education. There are three classes of people in Wall Street, bulls, bears, and jackasses. He does not know which group he is in, but he finds the work intensely interesting. Oscar Mayer calls them all "Wall Street Gyp Artists."

Ralph H. Gilbert, is with the New York Telephone Company, with the office of Valuation Engineer, at 140 West Street, New York. He left the Institute in the spring of 1918 to join the Army. After one year in France with the A. E. F., he went back to the Institute in the fall of 1919, where he received his bachelor's degree with the Class of 1921 in Course VI-A. The following year he received his master's degree. Since then he has been with the New York Telephone Company. Last fall he attended the American Legion Convention in France, which included an extended trip through France, Switzerland, and Italy. He is still unmarried.

Fred J. Given is living at 140 Roosevelt Avenue, East Orange, N. J. For the nine years since graduation he has been with the Bell Laboratories (formerly the Engineering Department of the Western Electric Company), reporting to the same boss and on the same job. The job has grown, however, so things are not as bad as such might imply. Work has been very interesting, not only from the technical standpoint, but also from the business standpoint, as the things he is interested in, such as coils and condensers, are the backbone of the telephone system, with a yearly production involving millions of dollars. He has acquired a wife and two children and a cosy little home in East Orange. He claims that several of the 1919 men have called on him and he hopes for more.

George G. Fleming claims that he got run out of the Hoosier State and now he spends an occasional evening arguing with McCarten as to who has the baddest baby. George's baby is a month older and probably wins. He says, "Dollars to doughnuts no one calls attention to the fact that Don Way waxes fatter and smoother than ever, while Max Untersee sports the prize lipsticker — ends neatly spiked for soup clearance."

W. O. Langille is very much married and living in Elizabeth, N. J. He speaks French fluently. He has been doing miscellaneous engineering work for the Singer Manufacturing Company which makes excellent electric sewing machines.

Oscar Mayer contributed the following: "Charlie Parsons has just completed a run of some time playing 'Our Nell' in a burlesque written by Ned Wayburn, and presented by the Junior League for a New Rochelle, N. Y., hospital. He has also distinguished himself as

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a yachtsman, racing sail boats on the Sound during the summer months. Charlie is employed by the Johns-Mansville Corporation, selling their products in Westchester County. — Oscar DeLima Mayer is engaged in launching a finance corporation and is also at the moment building a hotel, The Roget Smith, in Stamford, Conn. He has been appointed a member of the Executive Committee of the Geneva School of International Studies and subsidiary of the Committee on Intellectual Cooperation of the League of Nations, and also is the Treasurer of this institution which has its seat in Geneva, Switzerland. — George French now is located at 420 East 50th Street, New York. He was married early this year."

G. C. McCarten, of 2511 Newkirk Avenue, Brooklyn, is married and has one daughter, aged eighteen months. His job is with Charles Pfizer and Company at 11 Bartlett Street, Brooklyn, where he is doing chemical engineering. He lists some of the 1919 men he has recently seen or heard from. F. L. Mead, X, is working in the same plant with him. Hank Caldwell is selling for Swenson Walker Company. Doc Flynn is making lithopone for the New Jersey Zinc Company at Palmerton, Penna. R. L. Burbank is fire inspector for some Mutual Fire Insurance Company. Dan Hall is now in Delaware, probably with the Krebs Pigment Company. Gene Smoley blew in the night of the Tunney-Dempsey scrap, headed for graduate work at the Institute.

E. G. D. Paterson is now with the Bell Telephone Laboratory doing inspection engineering work on outside plant materials. He is married and has no children. The course that he finished in business administration last year was recreation after M. I. T. He had recently seen Bill Bennett and his wife. Bill and his three brothers, who are also Technology men, are running The Ideal Supply Company, dealing in wholesale plumbing supplies. For a Course VI-A man, Bill has made an excellent plumber. Paterson reports that Ken Pike was working in Hartford with the Westinghouse Electric and Manufacturing Company when last heard from.

Leon H. A. Weaver of 338 31st street, Woodcliff, N. J., is married and has two daughters, Gladys, eight, and Dorothy, four. He is publicity manager of The Superheater Company at 17 East 42d Street, New York. — Max Untersee has been busy for the last five years building a church in Brooklyn comparative in size to the length of time for construction. He sees very few '19 men, but he reads all the class notes. — T. E. Shea was not at the dinner, but wrote that he was sorry he could not attend because he was at the Institute giving a course in networks in the Electrical Engineering Department. Timothy spends three days a week at the Institute and says that it seems good to get back there again. He sends his regards to everyone. — Ross Goddard's father wrote to say that Ross was south and would not return for some time.

Notice has been received announcing the changes of address of Miss Elisabeth Coit to 32 West 50th Street, New York; Francis Coyne to 40 Rosalie Road, Oak Hill Village, Newton Center, Mass.; Richard Holmgren to 29 Daniels Street, Arlington, Mass.; and your Secretary has bought the front door and all its rights at 52 Hollis Street, East Milton, Mass.

The Boston *Evening Transcript* recently announced the wedding of Eugene Mirabelli to Miss Josephine Amarn of Lexington on Tuesday, June 19, in St. Brigid's Church. Mirabelli is an instructor at Technology. — PAUL F. SWASEY, *Secretary*, 52 Hollis Street, East Milton, Mass.

'20 I'm glad to have a collection of news items that requires no apology for the first time this year. If I were poetically inclined, I would liken the Class of '20 to a bunch of violets — a great big bunch of the modest, shrinking kind. Hardly a note came in that did not strike a deprecating, disparaging tone, on the idea that nothing had transpired anent the humble writer that could by any chance be of the least interest to his classmates. Actually this attitude is one hundred per cent wrong. The fact that you have the same job and the same wife is just as much news to the rest of us as if you had been winner of the Bunion Derby. The main thing is we want to know. Am I right? All right, then, come across with some dope about yourself, pronto!

First of all, I have been honored with a visit from Dusty Miller and Frank Maconi, both of whom by strange coincidence came into the office at the same time. Dusty appears none the worse for his extensive travels. He was about to return to Los Angeles where he is engaged in the promotion of Feather-Stone, an insulating material of great merit. He may be reached at 911 Matee Street. Mac Maconi is still in the bond business and doing well if I am any judge.

A good newsy letter from Chuck Reed, more power to him, reads as follows: "I am still with the Forbes Varnish Company of Cleveland, Ohio. About two years ago I was able to purchase some stock and am now an officer and director. Bill Loesch, '21, has been with us for several years and is in charge of pyroxylin lacquer manufacturing. W. R. McKenney, '19, is assistant sales manager. J. Gordon, '21, has been with us for a couple of months as salesman. I was sorry not to be able to attend the Reunion of our Class last summer, but hope to be on deck this year.

"By the way, I did meet Jack Nolan the other day. He has been in Cleveland for some little time working on some kind of a real estate development project. I had just a brief visit with him. Monroe Shakespeare, of Kalamazoo, gets to Cleveland occasionally and I have seen him several times a year during the past five or six years. Several months ago I had a letter from Dolly Gray in New Orleans, and I believe he is selling life insurance."

Another good one from Erwin Harsch gives more valuable news. He writes: "Dick Holmgren has recently left the Metropolitan Water Supply Commission and has become associated with Professor H. K. Barrows, located on Beacon Street. Dick is living in Arlington Heights and is the proud father of a future engineer, age one. I met Fairbanks in Augusta, Maine, recently. He has been for some time in the engineering department of the New England Public Service Company, engaged in structural design for hydro-electric plants. I also saw Sam Helrich on the street the other day. He looks hale and

hearty. Apparently the building business in Malden is prospering. Sam is still footloose and fancy free.

"I have just heard that Donald Kimball has left C. S. Bird in Walpole and joined the Eastman Kodak Company in Rochester. Your humble servant is still with Morton C. Tuttle Company and a close neighbor of yours in the Park Square Building. I have changed my place of abode from Cambridge to Belmont — not a very extended move."

Ernest Whitehead writes a most welcome letter on the impressive letterhead of E. Whitehead, Inc., general contractors, Worcester, Mass., to say: "After graduating I entered the building construction game with my father and have been associated with him ever since. I am fast getting fair, fat and forty, and have acquired a wife and two husky prospects for Technology. One is now two and the other four. I do not seem to run into many '20 men up here, although I have served three years as Secretary of the local Alumni Association, and am this year its President. The duties are not very arduous, for living as close to Boston as we do, most of the active Alumni attend the affairs at the Institute. Just now we are in the throes of preparing for our annual dinner the middle of this month and expect to have Lieutenant Albert F. Hegenberger, '17, as our speaker." [See page 521. — The Editors.]

Bill Dewey writes: "I am still in Baldwinsville, N. Y., as manager of manufacturing for the National Cellulose Corporation, making cellulose wadding and facial tissues. If you know any of the gang who are contemplating wedding trips to Niagara Falls, tell them to stop and see us as B'ville is only twelve miles from Syracuse. Remember me to the old gang."

K. B. White makes the following philosophical remarks: "1920 that is going to get married is mostly that way by now. Most of the early 'floating' that most of us did from job to job was a shaking down process. Yam Honiss was in last week-end. He looks as usual, aside from a new car, and is on the same job and in the same house with the same wife and daughter. I lead the same bachelor existence and try to make Simplex more efficient for my daily bread."

A nice note from Fraser M. Moffat, Jr., 40 Rector Street, New York, says: "I was an interloper to 1920, having graduated from Williams before the war (in 1918) and having dropped in on Technology for a hurried S.B. in Course X. However, the experience and knowledge gained seems to have carved me out a niche with the great American Dyestuff Industry and I am now living in New York and holding down a job as production manager for the National Aniline and Chemical Company, Inc. Our products seem to be more colorful than ever."

Fred Bowditch promises to come in and see me, but hasn't to this writing. I hope you see this, Fred. Here's his news: "I have just changed my occupation from a radio and marine sales engineer to a general realtor associated with John Beck at 10 State Street, Boston. In my spare time I serve as Secretary of the New England Outboard Motor-Boat Association with headquarters at 20 Brookline Avenue, Boston. Still being single, there is no other news or immediate prospects of any."

1920 Continued

Harold Bibber, back in the old U. S. A., writes: "A little over a year has passed since my wife and I returned to the good old U.S.A. by way of India, Egypt, and Europe, after more than three years in Japan. I am now in the apparatus sales department of the home office of the International General Electric Company. Here in Schenectady there are plenty of Technology men, but not more than three or four from the Class of '20. One of the 'men' whom I see from time to time is Mrs. Bruce Buckland (Florence Fogler), who has been calculating what steam does in turbines for quite some time now. A few months ago I spent a very pleasant evening with R. P. Warriner of Springfield, seeing his little daughter for the first time."

Bill Merryweather is Secretary-Treasurer of the Salt Creek Consolidated Oil Company of Denver, according to the letterhead. He writes: "Very little news except that I have a baby daughter born on Wednesday, April 25, 1928. I have another daughter six years old. I see Bunk Talcott quite frequently. He is out here for his health and is progressing nicely."

Good old Count Dumas comes across freely and frankly from Quebec as follows: "I am still working for the Quebec Technical School as professor in the departments of applied mechanics, electricity, and automobile. I got married last August to Miss Evangéline Lachance, a Quebec girl. Her name 'Lachance' may be translated as 'the luck.' I don't know yet for sure whether she will bring me good or bad luck, but I can say so far so good. I live at 1092 1/4 St. Valier Street, Quebec City. I would like the old friends to take note of that address, so if they ever come to Quebec they shall know where a hearty and moist welcome can be had."

The following eminently typical remarks emanate from Scotty Wells: "I have left apartments and now live with friend wife in a whole house. I recommend a house to every one. With a real mechanical engineer's equipment there are no more chores than in an apartment — automatic oil heat, automatic gas hot water, and automatic electric refrigeration. I am in the market for an automatic window opener and shutter. I see Jimmy Gibson who is doing a thriving real estate business out here. Buzz Burroughs is getting wealthy in New York, selling paper folding machines to printers. Dudley Murphy, who was in 1920 for only one or two years, is photographer or camera man for Gloria Swanson, and I saw his photograph in *Liberty* talking to her."

Dave Fiske, the lanky and laconic, states: "I am Secretary of this outfit — the American Society of Refrigerating Engineers — which is a worthy one, otherwise. I live in Bronxville, N. Y., and have a daughter."

Pete Lavedan sends the following: "I am now located in Kew Gardens, Long Island, and am still connected with the Liquid Carbonic Corporation of Chicago, with whom I have been associated since graduating in 1920. I am now gas sales manager of the company and make my headquarters at their New York office, located at 129 West 19th Street."

Ed Burdell remarks that the following history is not worth publishing but is flatly contradicted as the following gives evidence: "Since leaving school I have spent from one-quarter to one-half of each year in Mexico,

Central America, and the European Continent. These travels were usually made with some particular study or problem in mind. My last trip was last summer in Denmark for the State Department of Agriculture of Ohio. While I have been here in Columbus I have been connected with some banking and real estate developments that will keep me at home from now on more closely than heretofore. I have taken a more or less active part in local civic activities and this month as President of the local Red Cross went to the National Conference on Social Work at Memphis to read a paper. I have also been Secretary for the local Technology Club since its organization. I was married on April 2, 1927, to a young Danish-American lady whom I met on board ship returning from Holland a few months before. We have now a baby girl, Karla Kelsey Burdell, born March 15, 1928."

Skeets Brown has the following vitally interesting news from far off Parral: "As you already know, I have been here in Mexico for six years now, working at several of the American Smelting and Refining mining units and have been general superintendent of the Parral unit for a year and a half. Syner is at the Veta Grande Unit about eight miles from here as metallurgist. He is at present in El Paso doing some special research work, probably preparatory to building a new ore dressing plant somewhere in Mexico. I was in Boston for a visit last fall and talked with Professor Locke. It looks as if the rest of the miners of the Class of 1920 have all become wealthy and have all retired, judging from the news of their activities. Sy and I have the misfortune to have to continue working and who knows after fifty years whether we will be able to retire and buy that Los Angeles bungalow, what is the proverbial haven of wornout mining men?"

We are very sorry to report the death by pneumonia of Jack Logan's wife. The men of 1920 extend their deepest sympathy to you, Jack. Jack is still at Baltimore. He is assistant road foreman of engines of the Baltimore and Ohio Railroad.

George Burt sends a very interesting and most welcome letter from New Orleans where he is with the Celotex Company: "I came to New Orleans to work for this company immediately after leaving school, and with the exception of one interval of two years, have been here ever since. Also, with the exception of that two-year interval I have not had the opportunity to get back to Boston and it has now been something over five years since I was last there. As a result I suffered from an ailment which is probably chronic with a good many of our classmates and that is that I quite often get miserably homesick for the old Institute and the many pleasant associations connected with it. There are two '20 men here in New Orleans — Armand Kreeger and H. A. Gray — and I met Ralph Bartlett and Dave Fiske in Illinois last summer, but outside of those four I don't think I have seen any of the old Class."

"As for myself, I put in most of my time developing and helping to develop new machinery and processes for this company. I have found the work very interesting and enjoyable. My family consists of a wife and three-year-old son, George Jr., whom I am very seriously interested in training to be an earn-

est engineering student. Up to date his courses have been chiefly fundamentals of aviation (especially as applied to flying kites and model aeroplanes) with elementary courses in railroad construction and operation, and in machine shop practice. So far he has completely mastered the subject of demolishing any and all of the aforesaid demonstrations which I have so carefully arranged for him."

Ed Farrow writes: "I was appointed superintendent of Chemical Plant, Kodak Park Works, Eastman Kodak Company, Rochester, N. Y., last January. I have in my department approximately 500 employees, and have direction of acid plants, nitrating plants, recovery systems, non-inflammable film base manufacture, and manufacture of silver nitrate in which is used one-twelfth of the country's production of silver. So much for myself. F. J. Hopkinson is still a first class bachelor and is with the Eastman Kodak Company in charge of film development work."

Ed Bragg confides the following from 174 29th Street, Jackson Heights, N. Y.: "I've moved to the above address as you may note from your records. Tell the boys to stop in and see me some time if any of them ramble over this way. The wife is fine but she spends all her time and most of my money shopping in New York, but I managed to squeeze the attached two dollars out on the sly because I knew you really needed it, Bug. The kids? Well, there aren't any yet, Bug. Me? Well, I'm just getting over a tonsil operation and hope soon to get back to work to earn some money. You might give me the name of a good high class poor-house, Bug, if you know of any, and I'll keep it on file." — Jack Coyle writes: "I'm with the same company I went with after leaving Technology, The Billings and Spencer Company, and am now leading the triple life of assistant factory manager, chief engineer, and metallurgist. Unmarried, white, and so on."

Chick Dana writes to remind me that his business address is 1 Federal Street, Boston. — Al Fraser says he is proprietor of Fraser's Flowers, Wellesley, and was married last July. Congratulations, Al! — Pete Ash is with the New York Rubber Corporation, Beacon, N. Y., and living at Mahwah, N. J. I'll bet he is president, or next thing to it. — Charlie Carleton is living in Elizabeth, N. J. He says telegraphically: "Emphatically single — Linoleum — Recreation — Field Artillery and Indoor Polo." — Creighton Stanwood is still at Millinocket, Maine, in the paper manufacturing business but has changed from chemical to steam engineering. He says it's hot stuff. — Al Wason writes from Montclair, N. J. (which he says is the ideal place in which to live) that he is with The Cooling and Air Conditioning Corporation, 11 West 42d Street, New York. Al has a son, two and one-half years old. I'll bet he's no huskier than my daughter of the same age, Al. — HAROLD BUGBEE, Secretary, 9 Chandler Road, West Medford, Mass.

'21 Had freshman rules been in vogue during our sojourn on the Charles, traces of manners might now be noticed in the leader of the horde which follows us in this parade of the classes. The situation has be-

1921 Continued

come acute since the Gin Sec of 1922 imbibed his fill of the same at the wet party last summer. This self-styled secretarial analogue of the Ford Model T, for want of better motive power and steering facilities, has viciously rammed our rear end and hooked on his sorry old vehicle.

Its tag bears deuces wild and rampant — two of them, to further demonstrate lack of originality. Behind one of the wheels is the once Genial Secretary, Eric the Bold. With a bottle of IR drops he lubricates his infamous machinations, while from a vial he generously dispenses potash of potassium in sinister double crosses which shower on our own otherwise gay turnout. With your Asec's name bringing up the rear of the flock, we, of course, come in for the major portion of the burning chemicals.

But let that not disturb you, Friend Readers. After having seen the Hodgins Hoax in Boston recently we were quite prepared for the double crossing tactics presented with the 1922 verbosity in the May Review. Of course the skies were clear at the close of the conference as we reported in our notes — it is merely Eric's cynical hallucinations which would have it otherwise; and who wouldn't be cynical having to be a Youth's Companion in a musty old mansion which fairly verges on the Public Gardens, down there on Arlington Street.

Despite the heavy barrage of defilement which was hurled at several prominent pillars of the Class of 1921, Chris Carven, Walter Hamburger, and Dave Woodbury have successfully dodged the missiles of this presumptuous, or maybe just jealous, David. Martyrs that they are, they stand out as even stauncher supporters than ever. (Reg: Did they send you Dormitory Pledges?) Of course the men in question are '21 men and Eric is merely furthering his nefarious advertising schemes. We venture to suggest that Sampson got better results out of two columns.

But let D. O. Woodbury, VI-A, speak for himself. Writing on General Electric stationery which gives his address as 1 River Road, Schenectady, Dave says, "I hide my head in shame. My wife's uncle once refused to give us an Encyclopedia Britannica because he said the print was too fine, and I suppose from that I have got into the habit of skipping the 8-point in the back of The Review. I now hasten to read it, lapping over as far back as '16 and up to '25 to be sure to pick up all the little fragments of a carcass which the vultures seem to have spread thin over several counties.

"Really, you put me in a most difficult position. I would magnanimously like to belong to both classes, but if I did, don't you see what it would let me in for? First of all I would have both yourself and Eric Hodgins shelling me from the trenches of Camden and Bunker Hill. As fast as I could catch one projectile and remove its fuse, another would drop in from the opposite direction, and of course if two came at once, — well! As a matter of fact I can't afford to let Eric's shells burst because he is an editor and once upon a time I got into his office and laid an egg there which hatched, and I'm trying to lay and hatch some more. It wouldn't be good for the poultry business if I were to tell him haughtily that I was a year ahead of him and to shut up because mere frosh are supposed to

be seen and not heard. In engineering we must compromise to get practical results. In literature our practical results often compromise us. This egg has compromised me, so that if he says I am '22, why I am. Just the same, I write '21 after my name because it makes me feel more mature, and also because it happens to be the figure that the Institute authorities have agreed upon.

"Incidentally, and entirely apart from this story, I have an '18 and a '19 to drag along behind me also. Perhaps one of these days I will go by number only, thus: No. 18192122. I would no doubt fit into some regular series in the Cook County penitentiary and be at home." To prove that Dave takes his work in the General Electric News Bureau seriously he enclosed a sample release about the newly-invented Ensil Goopapa electrically lighted oil stove manufactured in the "decentralized" plant at Chicago, "which is connected by pipe line to the Whale Oil Company's plant in Bakersfield, Calif., and by transmission line to the Hectic Electric Company at Electron, Alaska, and by hot air line to the rest of the world for advertising purposes." We have a suspicion David is kidding us — write to him for a copy and photos and see for yourself!

We now present P. T. Coffin, VI-A, of 64 Park Avenue, Bloomfield, N. J., in a little skit entitled "Seeing Eric to Keep Him Honest," as follows: "Your postcard of some months ago has been lying in one of the pigeon holes of my desk patiently awaiting an answer. The somewhat caustic crossfire between '21 and '22 which has manifested itself recently prompted me to chip in and do my part.

"Some of the boys will be surprised to hear that I am now a substantial citizen of the community, having become the lord and master of a son and heir born March 31. Buck and some of the others don't seem to have the right spirit, although I suppose the quantity production bogey established by Dave Woodbury, Herb Nock, Dugie Jackson, and the others has discouraged them.

"L. O. Buckner, VI-A, as you probably know, is located in York, Penna., and is a commercial power salesman for the Metropolitan Edison Company. His latest report was to the effect that he is well satisfied in every respect. Buck can be reached at 4 South Queen Street, York, Penna. S. M. Jones, VI-A, is still with the Alabama Power Company, and according to reports, is rapidly becoming of more and more prominence in the company's affairs. G. A. Chutter, VI-A, dropped in to see me the other day en route to Birmingham, Ala. I understand he is to assume the responsibilities of sales engineer for that district for the General Electric Company. R. H. Gilbert, VI-A, and I have lunch quite frequently together and manage to get in quite a bit of conversation when he isn't practising French on the waiters. I understand Fish is doing very well with the New York Telephone Company. He is located at Room 1308, 140 West Street, New York.

"Now in regard to the fall which the Gensec of '22 endeavored to take out of you birds in connection with Dave Woodbury's occupation. Dave is unquestionably of the Class of '21, and I claim any error you may have made in regard to occupation fades into insignificance compared to an unpardonable error in the '22 Notes. The statement is made that F.

R. Dallye, '22, is engaged. Ye gods and little fishes! He has been living three floors above me in a state of connubial, nuptial, conjugal, or maybe some other kind of bliss, for months and months. If this isn't more important than a change of work — well, let's let Eric explain it.

"You know I think it's well that the Class of 1922 has us '21 Course VI-A men to keep tabs on their men. I could mention the activities of lots more '22 men, but I won't for spite. For example, there's Larry Coddling — but let the Gensec of '22 name his price and I'll talk business!

"R. M. Shaw, VI-A, was living temporarily in Moorestown, N. J. [Rufe, if you are still in this vicinity, please phone me at Moorestown 870-Cac.] He is married to a very attractive little Southern belle. (R. W. Smith, please take notice.) He was with the U. S. Cast Iron Pipe Company in Burlington, N. J., but with his nomadic tendencies, there's no telling where he is now.

"I am located at 120 Broadway, New York, with the Aluminum Company of America. I don't sell pots and pans; to the contrary, I buy them when needed. My actual work is the sale of aluminum electrical conductors in the New York territory. I'll also hold out a lunch to any orthodox '21 man who will go out of his way to drop in and see me — Jack Teeter, for example, or perhaps yourself." Many hearty congratulations from all of us, Pip, and thanks for your aid in our time of need.

Hot upon Pip's letter came two from D. C. Jackson, Jr., from 4506 South Sixth Street, Louisville, Ky., one of which packs a wallop like the corn they have down there. Dugie was the loyal '21 man who called the 1922 bluff some time ago. He continues with: "There seems to be no stopping of Eric Hodgins — he needs must lay claim to the members of our Class. The latest is Dave Woodbury, concerning whom he quotes the Register of Former Students in his vain endeavor to make good his claim. If anyone cares to refer to the March 1925 Register, he will find that David Oakes Woodbury is listed in the Class of 1921 on Page 208. Apparently this Purloiner of Princes preferred to draw his own conclusions as to the meaning of the ('22) following the VI-A S.B. after Woodbury's name, rather than determine the true interpretation. For the ignorant and gullible, let me state that the meaning ascribed to this arrangement of numerals by the Register is that the man in question received his degree in that year, although he is considered a member of the class in which he is listed. If the Gensec of 1922 should investigate further, he would find that on Dave's diploma for his S.B. degree are the words 'As of 1921.' But I fear the Gensec is slipping. So far as I remember he has claimed only three of the VI-A men with the ('22) after their names, and there are twenty-two more of us who have the double two following their degrees. Even I am labelled in this manner and yet the worthy Eric admits in the May issue of The Review that I am a member of '21. Such consistency! He is indeed sinking rapidly in a quicksand of words; it is pitiful that so fine a young man should have come to this. He must needs fill his column with fiction and eloquence, but no news of his own classmates. He spends seven lines to tell us that

1921 Continued

we are wrong as to Dave Woodbury's present job. If he knew Dave as well as I do he would not let a little thing like his supposed job bother him. Dave is not like most of us poor mortals — his avocation is his job with the General Electric Company, whereas his real vocation is the designing and building of speed boats. If Eric will continue in his present path, there will be no need for the '21 Sec and Asec to hunt for news of the Class — he will supply it all.

"In looking over my last effusion which spoke of a number of children, I note it omitted any mention of my own. In case any of the Class is interested, here is my present status: three children living, Dugald Caleb, 3d, nine years old; David Whitman, six years old; and Elisabeth Wyer, 2d, born October 25, 1927.

"Did I tell you that I ran into Herbie Nock the first day of the N. E. L. A. convention here? He came down from West Lynn, Mass., to see that the recording and remote indicating meters in the new hydroelectric plant here were operating satisfactorily. Also that R. M. Shaw blew in a couple of weeks later with his very attractive bride. Since my last letter, I have sold the *Spurt of the Moment* (a very much used 1922 Lexington touring car) and acquired the *Pup* (a 1928 Whippet sedan). The make suggests the name; it is also because, as Mrs. Jackson says, 'It is so doggy.' [Doug seems to go the limit when it comes to certain numerals!—Asec.]

"I was interested to see that the Review Editors thought well enough of my baby statistics and castigation of 1922 to mention them along with your coining of the word Asec in the introduction to the News from the Classes. However, the Editors did not think well enough of them to give me credit for them. Be that as it may, I am wondering how the rest of the Class compares with VI-A." We don't get credit for having coined Asec either, according to Eric the Naughty, and the Review Editors pounced upon the word as something new. Their memories are much too short-lived — we refer them to issues of The Review back in 1921 or 1922 where we first used the word.

A. R. Davis, X, 54 Lincoln Street, Hudson, Mass., steps up to the microphone next: "After reading all the news and rumors of '21 men in the recent issue of The Review, here is my contribution. A son, Leland Paul, was born to us on April 4, 1928. I have been working for the same concern since obtaining my first job. I am chief chemist for the Firestone Footwear Company, manufacturers of rubber footwear, heels and cements." Congratulations and thanks, Jeff. I hope the Man with the False Whiskers and the Magnifying Glass won't find it necessary to visit your section in the future; he is laid up with a bad cold this month, so those who haven't written will have a short respite, but he guarantees to make it hot for them during The Review's summer vacation. Better write now.

From the Philadelphia *Public Ledger* of March 25, comes the following: "Invitations have been issued by Mr. and Mrs. W. H. De Courcy Wright of Baltimore, for the marriage of their niece, Miss Margaret Eyre Taylor, to Mr. Henry du Pont Baldwin, II, of this city, son of Mrs. Henry Furlong Baldwin, of Louisville, Ky., which will take place on Tuesday, April 10, in Grace and St. Peter's

Protestant Episcopal Church, Baltimore." Here's how, Baldy.

And from the *Evening Public Ledger* of April 28: "A new method of case-hardening by a nitrogen process was described by Dr. Victor O. Homerberg, X, metallographer of the Massachusetts Institute of Technology, at a meeting of the Philadelphia Chapter, American Society for Steel Treating, last night in the Engineers Club. By forcing ammonia gas through a retort in which the metal is placed at a temperature of about 900 degrees Fahrenheit, a case is obtained which is harder than can be made by present methods at a heat of 1500 degrees. The process is considerably cheaper than chrome plating."

Professor C. E. Locke, '96, the patron saint of all class secretaries, sends us this welcome note about Ernie Gordon: "E. R. Gordon, XII, writes that for the past three years he has been with the American Smelting and Refining Company at Santa Eulalia, near the city of Chihuahua, in Mexico. For the first six months he was engineer, but the remainder of the time he has been mine foreman and for two years past he has had charge of Mina Vieja which is one of the older mines. Due to decreased price of silver and lead, he has had to keep his nose to the grindstone in order to get good ore to ship, but says that in the past few months things have been looking much better due to a couple of lucky finds of good ore in a part of the mine which was supposed to have been worked out some time ago. He has 200 men working under him and the labor situation is very satisfactory owing to the surplus of men. He is now the father of a daughter six months old." Congratulations, Ernie.

We apologize to J. W. Rockefeller, Jr., IX-B, for not having answered his fine letter. He says in part: "Some time ago I heard that you were down in the vicinity of Deal Beach with the Bell Telephone Laboratories, and I dropped out there a couple of times but unfortunately could not seem to locate you. Since that time I have been pretty much out of touch with everything going on at the Institute, due to my being securely anchored to this city. It looks now as though I shall be in Philadelphia on and off during the summer and the next time I get over that way I shall stop off in Camden and look in on you.

"During the last couple of years I have been doing some work in connection with one of the research committees of the American Society of Mechanical Engineers on mechanical springs. We have a research man at work in the laboratories of Union College at Schenectady and we are exerting every effort to make this research productive of results that will not be purely academic." John is now a consulting engineer with offices in the Woolworth Building, New York.

Your Asec had an interesting visit to the Institute last month in search of new men for our laboratories. I saw quite a number of '21 men, among them H. M. Lane, O. G. Dahl, and J. L. Entwistle, all Course VI, and all in the Department of Electrical Engineering teaching the young idea how. J. B. Mattson, VI, who is with the law firm of Andrew Peters, Boston, was discovered in Professor Bush's office. We were royally entertained by the H. R. Kurths and the M. B. Lees. Chick Kurth, VI, is with the Generating Department of the Edison Electric Illuminating

Company. The Lees have a charming house at 62 Wildwood Street, Winchester, designed by the Mrs. who will be remembered as Connie Nelson, IV. Having stopped at the Statler we took advantage of the invitation in the 1920 Notes and dropped in to see Harold Bugbee, Secretary of the Class of 1920, who is Vice-President of the Walter B. Snow Advertising Company. And then we went to see Eric Hodgins, a fairly companionate youth, but given to yellow journalism.

Our sole Camden visitor this month was Professor Vannevar Bush of the Electrical Engineering Department of the Institute, who spent a morning with us. Dr. Bush was in Philadelphia to receive a medal from the Franklin Institute for his papers on the integrator.

A. W. Skilling, I, Secretary of the Technology Club of Western Pennsylvania, 1300 Arkansas Avenue, Pittsburgh, Penna., crashed through with a big letter in answer to our distress call. Art says, "The lateness of the date line forbids my offering this as an answer to your very interesting letter. What really brings this out is the sad situation which the notes in the April number of The Review reveal you. You record therein your valiant attempt to make reporters out of a lot of engineers and sales managers, and exhibit the results, namely, a solitary letter from Wint Dean in far off Minneapolis.

"Upon some reflection, the cause of the scarcity of news from your correspondents, or those you would like to have for correspondents, is natural enough. I attribute it to that median period of time which has elapsed since graduation. This is the lull between the first flush of a new job, the high hopes, the aspiration, and ambitions which see success only around the corner, and the maturer time of real accomplishments. It is the Monday morning time of the newspaper week; the teething time of babies when their pink toes have ceased to be interesting, and their babble is not yet consecutive enough to be intelligible.

"In Pittsburgh there is at present no lull, no Monday morning dearth of news. Only a month ago what might be termed the Pittsburgh branch of the Class of '21 was invited to a bridge by Mr. and Mrs. A. A. Turner, I. The guests were the Hartwell Flemmings, VI, the F. B. Kittredges, I, the D. A. Robbins, II, and the A. W. Skillings, I. Coming over from Boston I met F. L. Blewer, IX-B, quite by chance in the diner. Frank is with Harris, Forbes and Company in New York. L. L. Stuart, IX-B, has lately come to Pittsburgh with the American Tar Products Company." After that lecture, Art, we hope everybody goes and does likewise.

We wish to extend our sympathy and that of the Class to P. E. Guckes, X, on the recent death of his father.

Course V leads with the first announcement we have received of the June, 1928, weddings: "Mrs. William Elijah Neal requests the honor of your presence at the marriage of her daughter, Louise, to Mr. Kenneth Harden Pratt, Saturday evening, the ninth of June, nineteen hundred and twenty-eight, at eight o'clock, Silsbee Street Friends Meeting House, Lynn, Mass." Hearty good wishes from all of us, Ken.

Just as we go to press two babygrams rush in under the wire. The first is from Mr. and

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Mrs. R. A. Snow, II, and bears the tiny pink-edged card of Josephine Fidelia Snow, who was born on April 14. Benny is in the power department of the Carolina Power and Light Company at Raleigh, N. C. — Arriving as a co-pilot in a plane of the "Babyland Line" with Mr. Stork at the controls, we guess, from the card received from Mr. and Mrs. W. G. Loesch, III, that Robert Charles Loesch, who arrived on April 22, will possibly take Course XVI with the Class of 1949. Bill is lacquer chemist with the Forbes Varnish Company, 3800 West 143d Street, Cleveland, Ohio.

This being the last appearance of The Review until November, we wish everybody a mighty pleasant and prosperous summer. As a gentle reminder, renew your membership in the Alumni Association and your subscription to The Review. We will guarantee some genuine scandal when the Man gets back on the job. And let's hear from you, too. — R. A. ST. LAURENT, *Secretary*, 225 Cleveland Avenue, Whiting, Ind. CAROLE A. CLARKE, *Assistant Secretary*, Victor Talking Machine Company, Camden, N. J.

'22 Your Secretary regrets that illness keeps him from taking a decent farewell this month from the responsibilities of office until the first issue of The Review next fall. Several news items of importance will thus be forced to wait. We can, however, join in the chorus of congratulations and good wishes to Don Carpenter, President of the Class from 1921 to 1927, whose marriage took place on May 31. We quote details from the Boston Evening Transcript, only wishing that it were possible for us to add more to the account of the happy event.

"On Thursday, in the home of Mr. and Mrs. Marcus A. Coolidge, 164 Blossom Street, Fitchburg, their daughter, Miss Louise Coolidge, became the wife of Donald Fell Carpenter of 443 Merriam Avenue, Leominster, son of Mr. and Mrs. B. Harold Carpenter of Wilkes-Barre, Penna. The ceremony took place at high noon and was performed by Rev. Francis W. Gibbs of Fitchburg.

"Mrs. Robert E. Greenwood of Melrose acted as matron of honor and Miss Helen Coolidge of Fitchburg as maid of honor. Lansing T. Carpenter of Wilkes-Barre was best man and the ushers were Frederick N. Dillon, Jr., of Fitchburg; H. Clifford Gayley of New York; Robert E. Greenwood of Melrose; and Othniel G. Williams of Winsted, Conn. The reception was held at the Oak Hill Country Club. After July 1, Mr. Carpenter and his bride will live at 443 Merriam Avenue, Leominster. A pre-nuptial event was a dinner given for the bridal party and out-of-town guests by Frederick N. Dillon, Jr., at his home, and a dance by Mr. and Mrs. Coolidge at the Oak Hill Country Club."

Final news flash: Just in time to catch this issue comes the announcement from Class President Heinie Horn to the happy effect that Robert Alexander Horn, weight seven pounds, eight ounces, was born on May 29, and that all is well. Whoopie! — ERIC HODGINS, *General Secretary*, 8 Arlington Street, Boston, Mass.

COURSE II

The closing knell of The Review, Volume XXX, finds the Course II Secretary totally

snowed under with material for transmission to the worthy coursemates, a responsibility which weighs heavily on his shoulders indeed. Responses are still included in the incoming mail and happily so. While it is my pleasure to hear from so many of the respected mates, it is also my negligence which prevents the onward passage of the good and welcome news. If space refuses to be sufficient it should be a part of the secretarial duty to answer any queries that come in concerning the whereabouts of any of the boys whose cards have been acknowledged in recent issues.

We can add to that last, news from Arturo Ponce Canton, Lloyd Elmer, Colby Boyden and Dick Kasch. Dick cashes in with a regular two-cent letter and therefore deserves honorable and prior mention. He writes from the University Club, Richmond, Va. He is an old timer with the Liberty Mutual Insurance Company of Boston, and has covered the South for five years on accident prevention work. While Dick is not yet married, he boasts all the prerequisites.

The Editors and I have agreed to call it a halt and postpone additional notes until they can arrange a special '22-II edition, or rather volume. Best of luck and a hot summer to all the happy families and bachelors. — JOHN E. SALLAWAY, 1860 Broadway, New York, N. Y.

COURSE VI

Reed Dallye, after nearly six years, has broken his great silence. If there is any one who believed Reed would remain *nolo contendere* for six years please stand up on the soap box and receive one used 1924 democratic ballot as first prize for judgment. That does not necessarily mean that Reed should not receive his credit, *cum laude*, for doing what we had expected of him previously. To the contrary, he and his co-author, Larry Codding, should be well rewarded as life savers. Just as we were going to press with Course VI contributing only the spaces between the lines, Reed stepped forward with the following fanfare:

"K. S. Andem is with the Public Service Production Company, now a part of the United Engineers and Constructors, Inc. Up until quite recently he has been doing field work on the construction of the Kearny Power Station. He is now in the electrical engineering department, specializing in control, relay and metering design for generating stations, switching stations, and substations. He is also much married. Jimmy Nesmith is assistant to the chief electrician at the Kearny Power Station, which is the base load station for the Public Service system. His problems are operating ones that arise in the modern generating station. Jimmy is married and has a small daughter.

"Howard Spooner is in the electrical construction department of the United Engineers and Constructors, Inc. He is concerned with the coordination of the engineering and construction departments. Larry Codding is an engineer in the Public Service Electric and Gas Company, working on the development and design of the 220,000-volt transmission connecting this company with the Philadelphia Electric Company and the Pennsylvania Power and Light Company. He still remains the only bachelor of the '22's with the Public Service. (Poughkeepsie,

Northampton, and Wellesley papers, please copy!)

"Reed Dallye is with the United Engineers and Constructors in the electrical engineering department. He is engaged in the design of the 132,000- and 220,000-volt switching stations being erected by the Public Service Electric and Gas Company. On October 4, 1927, he joined the ranks of the benedicts and is now living at 64 Park Avenue, Bloomfield, N. J."

Thanks, Reed and Larry, that was a very welcome letter. Congratulations, Reed, for your activities of October 4, and more volts to you, Larry. — FEARING PRATT, *Secretary*, 120 Main Street, Hingham, Mass.

'23 I am sorry that we are unable this time to chronicle the events of our Five Year Reunion, but at the present writing this affair is still three weeks away. Full details will be given, however, in the November Review.

A note from Frosty Harmon gives us quite a little news. Frosty is married and living in San Francisco. He says: "I have a job as promoter of business for National Tube Company with whom I have been ever since graduation. I like the work very much and am managing to eke out a living at it. I wish I could be in Boston more often to get back to the source of activities, and did make the trip back with my wife last November. I saw Bob Kean, who recently married and is researching for International Filter Company in Chicago. P. C. Smith is married and working in New York for the Telephone Company, where he recently had a good promotion. F. P. Squibb is married, has a son and is also in New York working for Sherwin Williams. Bob Stuart is married, a father, and is in the contracting business in New York. Newt Brown is in Boston running the furniture manufacturing business of French and Heald. J. A. Abbott is in Boston, too, selling mechanical equipment to municipalities, and if you want to see a thorough politician just look up Red. R. D. Brown is married and helping out the N. E. Tel. and Tel. Co. in Boston. Bob Hershey is at Technology doing research work and looking for a higher degree. On the west coast are J. D. McFarlane, married; and Ted Nesbit, single, rapidly growing rich in South San Francisco raising mushrooms. Bob Shrake is married and has a son and has been in San Francisco, but has recently gone to Texas for the Southern Pacific. In Los Angeles and environs are Ben Lane, married and with a son, keeping the Sullivan Machinery distinctly on the map in that district. K. C. Kingsley is also married and has a daughter and is keeping the Californians clean with the Los Angeles Soap Company. Charlie Toll is also in Los Angeles."

Al Guerrero is now working in Colombia. Since leaving the Institute, he has worked with the Oil and Gas Division of the Henry L. Doherty Company, of New York, first in New York, then in Mexico and now in South America. Al says he has two brothers going to Technology this year.

D. B. Coleman is working as engineer with the Missouri Portland Cement Company. He says, "As to my personal adventures, since '23, there's not much to be said. I've been with the Missouri Portland Cement

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Company since then as engineer, safety supervisor and what have you. Technology '23 seems to be something of a novelty hereabouts. I see Sam Gordon, now a husband and father, occasionally, also Jack Rule and Herb De Staebler. Harry Estill with American Radiator, has recently been transferred to Springfield, Ill. I saw my ex-roommate John Cruger Todd and Jim Henderson in Chicago a few months ago. Both of them are with Davis Concrete Construction Company."

Charles McCann is now working with the Inland Manufacturing Company at Dayton, Ohio, a division of General Motors, manufacturers of steering wheels and other parts. — I just received a note from Bert McKitterick asking me to change his address to 87 Upham Street, Lowell, Mass. It seems as though Mac has had a prosperous year because he is buying a house. — Some time ago we received a letter from C. P. Thayer. He has been appointed as head of the Physical Department of the Y. M. C. A. at San Juan, Porto Rico, and he is also President of the Athletic Commission of Porto Rico. He expects to be in the United States this summer. — ROBERT E. HENDRIE, *Secretary*, 12 Newton Street, Cambridge, Mass. H. L. BOND, *Assistant Secretary*, 18 Greenwood Avenue, Hyde Park, Mass.

COURSE VI

The Course Secretary hopes that now that he is up in the thick of things, news from the boys will find a shorter and easier path to him. Toward that, he appends his new address below and states further that his new connection is as technical writer with the Ford Instrument Company, Long Island City, manufacturers of specialized computing apparatus. We must leave it there; the alternative is to take two full columns for a description. Further information furnished on personal request; no two cent stamp needed. I might add that this Ford company has no tie, save that of nationality, with the egregious and ubiquitous Ford.

Along comes a note from Ray Willis, now living at 86 Dana Street, East Providence, R. I., telling that he is no longer drawing lines with the American Tel. and Tel., but is doing just that with the Rhode Island School of Design. Lots of us were afraid Ray would go off at this tangent; many a phrase in his undergraduate utterances was directed at the rigidity of mechanics and the freedom of art. Ray says it is commercial; he's out for a quick turnover, we see. Married, and one three-year-old replica, he says. The last he heard of F. T. Hazeltine is that he was busy keeping a daughter and a son within the bounds of Denver.

I ran into Dick Kleinberger the other day. We both were pushing nickels into subway turnstiles and rushing to places where we could push the grindwheels against their perpetual inertia. Dick worked on subway construction here, awhile, then was design engineer on substations in Jackson, Mich., and now, seeing that the engineering field is too insecure for a touchdown, becomes a bond salesman with the William R. Compton Company of New York. Dick used to see Salus when he was with Stone and Webster in New York, but he hasn't glimpsed him since he was moved to the Boston offices. — ALBERT

J. PYLE, *Secretary*, 337 West 88th Street, New York, N. Y.

COURSE X

Joe Preston writes from 311 Collins Street, care of A. G. Spaulding and Brothers, Ltd., Melbourne, Australia: "Regarding Australia, a few words after looking over a very small section will not give you a true picture, for as far as Melbourne is concerned, it is not representative of the country, but I am not in a position yet to see much of the country. Melbourne and its vicinity are quite satisfactory, but still there is a lot to be desired. The roads are filled with pot holes like shell holes, huge two horse wagons loaded with hides or wool wander all over, little baby Austins and steam trucks cut in and out, the crowds flock to the pubs before the six o'clock closing hour, the very dead Sunday mornings, no Sunday papers, no tobacco after six o'clock, no trams on Sunday until two o'clock, the rather toy electric heaters in the theaters — these are some of the points peculiar to this country that I have noted. However, they pass along to be forgotten. The money is simple, food is cheap, so what is there to worry about?"

"I have not met any Technology fellows yet, but I have met one Harvard man who is pressing clothes. . . . We have nothing in common except when I remind him of the Back Bay raids. Golf, tennis, swimming, handball, snooker, and reading — oh yes! dancing, are all part of my program at present."

We met Professor Blanchard on a train at Saratoga last month and exchanged Institute news. While in Cleveland we called up one William Kenmore Schweitzer and learned that he is married and doing research for the Grasselli Chemical Company. "How many little mutts have you?" we asked. "Just a minute," he replied, and was gone long enough to count sixteen. Then came the answer proudly, "One!" We tried to coax him down to the station for a chat, but Mrs. Schweitzer wouldn't hear to it. Didn't want her Will'm traveling round with these rough X-A boys again.

With this issue we complete our terms as Course Secretaries and wish to thank the boys for their assistance and hope they'll help out our successors. — H. F. COTTER and D. S. DAVIS, *Secretaries*, Bureau of Tests, International Paper Company, Glens Falls, N. Y.

'24 Not so very long ago while waiting for dinner I had a telephone call from Henry Simonds. Quite surprised to hear his voice, as I thought he was safely in Pittsburgh, I made arrangements to meet him at the corner and to meet Mrs. Simonds. Yes, sir, he was on his honeymoon trip, having been married on April 21 to Miss Marion Manola Taylor. When I saw him he was trying to make New York State in a new Willys-Knight before stopping for the night.

D. M. Creveling, who is with the Real del Monte Company at Pachuca, State of Hidalgo, Mexico, has been transferred to another mine of the company which is only five miles from the center of Pachuca so that he is back into civilization again and very favorably situated in that he can run into the City of Mexico very readily and enjoy the pleasures of a big city. Such visits on his part are quite

frequent but his regret is that the bull fight season is over. However, he can take in the various shows in the capital and finds it a pleasure to so do in view of the long period that he has been out in the "sticks." He is now night foreman in the Camelia mine. — H. G. DONOVAN, *General Secretary*, 139 Girard Avenue, Hartford, Conn.

COURSE I

Adding to my family to the extent of one son seems to have done more to increase the volume of my incoming mail than any other single act which I have committed since undertaking this thankless job of trying to keep tabs on a bunch of gypsies with a civil engineering education.

Two of the recent contributions were undoubtedly written to show me that I had not pulled off anything original. Gordon Harvey writes: "I feel that I should be in the front ranks of the staid married set in that I was 'hitched' on March 30, 1925. And as for the honors that go with it, Miss Patricia Marie Harvey was born on November 9, 1926, in Montauk.

"Since graduation I have been with the Boston Edison, with the Massachusetts Suffolk County Engineer, with a Florida development, and since June, 1926, with my present salary donors. The Montauk Beach Development Corporation is about the largest real estate project in the north, I believe, and in my mind in a fair way to be a big success. My duties as assistant engineer involve layout, inspection and plans for a 2,300,000 cu. yd. dredge project now under way, design of marine structures, inspection of construction under way, and general handy man for odd jobs ranging from architectural and mechanical engineering to engineering aid to salesmen. The work is very interesting and having been here all of one year and ten months, the wife and I feel like old established members of the community."

Excerpts from an epistle by Max Ilfeld follow: "After graduation I went out to Milwaukee, Wis., where I worked for the S. M. Siesel Company, general contractors. In the summer I was in the Marine Branch, building docks and breakwaters, and in the winter I was on building construction or estimating. Last fall I received a worth-while offer from the Blaw-Knox Company of this city (Pittsburgh) so here I am designing, estimating and selling standard steel buildings. In the spring of 1925 I was married to Miss Bertha Rosenan of Brookline, Mass. We have a boy two years old. I want to congratulate you on being the proud father. No doubt you find life somewhat more complicated already. You will find it far easier to design a sizeable structure than change a diaper. I know."

One of the hardest parts of your Secretary's job is to keep a record of Tapley's latest address. He recently wrote as follows from Potsdam, N. Y.: "You'll need a weekly publication to keep track of me. I am not a fixture as yet anywhere. However, I do proudly boast that I am still in the water power racket, notwithstanding the flow of stronger fluids from the Canada side. My work is structural and hydraulic design in connection with various new plants on the Raquette and Osswegatchie Rivers. C. P. Worthington, '25, occupies the next stall in our miniature

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drafting room doing similar work. He and I were old pals in Louisville, Ky., and are now enjoying reminiscences of those adventurous days. No, we are not gray-headed or gray-bearded and we are still trying to make a splash in this unbelieving world."

With the above final flourish another Review season ends. I can sympathize with Tapley's predicament but I thank God that this is not a weekly publication. — JOHN D. FITCH, *Secretary*, c/o Chas. T. Main, Inc., 201 Devonshire Street, Boston, Mass.

COURSE XIII

Once more we begin with the same old story of "not much news," although of the news we have received we must say that the old adage of "in the spring a young man's fancy lightly turns to love" seems to be holding true among the few remaining bachelors of Course XIII.

We were the recipients of a card announcing the engagement of Ed Russell to Miss Helen W. Vincent. Congratulations, Ed. — A second of our number we understand, is about to take the fatal step. By the time this letter has gone into print we anticipate that wedding bells will have rung for El Thayer who takes Miss Barbara Senior of Weymouth as his bride.

Having taken care of Cupid's column we seem to run out of material, with one exception. Yours truly spent a very enjoyable week-end in Pawtucket with the Ashworth's, and is glad to report that Fred has fully recovered from his recent operation, and is once more the Ashworth of old. Fred is very busy — has charge of the sales division of the Blackstone Valley Gas and Electric Company.

Members of the 5-430 Club will be interested to get back into the Naval Architectural Museum and see the many changes which have taken place. I had the pleasure of strolling through there the day this letter was written and among the many things added were: a radio direction finder contributed by the Radio Corporation of America; various means used by the Navy for detecting a submarine; a very interesting model of the airplane carrier *Lexington*; and some graphical explanations of the uses and value of the Sperry gyro-compass. I certainly enjoyed an interesting noon hour among this collection. On Open House Day I drifted into the model room where things remain much the same. George sends his regards to all the fellows.

As you all realize, this is the last issue of The Review until fall, so get busy and let's have some real news to start off with in October, 1928. — GORDON C. JOYCE, *Secretary*, 16 Grove Street, Malden, Mass.

COURSE XIV

Totally unexpectedly, I received a long and newsy letter from Morris Johnston bearing the good tidings of his marriage to be on June 17 to Miss Beth Robinson. Miss Robinson is a Toronto girl, a senior at the University of California at Los Angeles, and has been studying biology with the intention of continuing pre-medical work at Berkeley.

Norris himself goes into some detail as to his recent doings. From being a research engineer with the Carborundum Company at Niagara Falls, he went in 1926 to the Cali-

fornia Institute of Technology with a teaching assistantship in freshman physics. He taught it with a luck and fun, so much so that when the course was completed the youngsters gave him a pen and pencil set. The present year has been spent with another fellowship, but not in teaching. He had his option of teaching or research and chose the latter. The fellowship is founded by the American Petroleum Institute and his is Project 34, a study of the sedimentation distribution of colloids. His letter shows great enthusiasm over it and he will continue the work next year when he hopes to get his Ph.D. He is to take the minor in chemistry and seems to be working hard for the day when he will have to stand up for three hours before all the professors and answer all questions.

He ends in this manner: "I hope to hear some time from Morgan. Has he passed out entirely since he got married? I certainly shall try not to. What about Mattson, Duffy, and some of those chaps we never hear from?" And your Secretary echoes his sentiments. — H. G. DONOVAN, *Secretary*, 139 Girard Avenue, Hartford, Conn.

'25

Harold V. Robichau has just been married to Miss Florence E. McPherson at Beverly, Mass., on Tuesday, May 8.

They will be at home after June 1 at 418 Bellevue Avenue, Syracuse, N. Y. By personal investigation I have found out that their phone number is Warren 7271-M. — Wilder Emery Perkins was married to Miss Pheobe Esther Harrold at Passaic, N. J. on April 4. — A. Burnham Whitehouse was married to Miss Mathilda Eby Crawford at Baltimore on Saturday, April 14. — Kenneth K. Ayer was married to Miss Alice Paulita Lammers at San Antonio on February 25. They are to make their home at 126 North Drive, San Antonio.

Daybert and Mahoney, civil engineers, announced the opening of a general engineering office on April 1 at Room 5 in the Chamber of Commerce Building, Torrington, Conn. The fact that April 1 fell on Sunday gave us a few doubts at first, but we have found out that Daybert and Mahoney are civil engineers and not April Fool experts.

Jesse Green has opened an office in Birmingham in the Educational Building for the practice of landscape architecture. — Mabel Macferran is in the test department of the Southern California Edison Company, and has furnished plenty of news in a letter to Professor Jackson, from which I will quote: "Then there is Scripps in the drafting department, working on substation design, at last accounts. For myself, I am enthusiastic about the Edison Company, and particularly about the test department. I have been given an opportunity to gain experience on a good many different kinds of apparatus, which is what I wanted. I was started in on meter testing, as is every new college graduate whom the test department hires. Then I was transferred to the transformer testing department and allowed actually to work on the transformer test for some little time. Then they put me on transformer calculations for a while. Later by a lucky combination of circumstances, I was able to work in some special test work. I have visited most of the principal substations and one of the steam

plants, but this is not the same as performing work on the premises. However, I feel sure even that will come in time."

J. Marshall Osborne writes as follows: "I just thought I would drop you a line to let you know I'm with the Insulite Company at International Falls, Minn., as superintendent. I cannot say that the town is anything to brag about, though the close proximity of Canada has its compensations, for those that feel that way. Anyway the work is interesting each minute, and as we are in the midst of a large building program, I manage to find something to think about. There is not a sign of a Technology man within 300 miles of here, so I haven't much news to offer. Any of the gang can reach me here or at the Sixth Street home."

We have just had reported to us the death of John L. Hosch, of Portland, Ore., sometime in April or May of last year. Further information comes from a classmate by way of The Review office. Hosch was killed in an airplane accident. His job in Washington was assistant to MacCracken in the Department of Commerce in charge of stress analysis work and the licensing of transport pilots. He had given an examination to a pilot, and took a ride with him after it, although the examination did not call for it. Something went wrong and Hosch was killed.

Sam Spiker at March Field, Riverside, Calif., where he is learning to be an aviator, manages to send in a few notes to help me edit his course notes: "I had a note from Jack Sawyer, one time leader of the mandolin club and a member of our Class. He has gone with the International Paper Company in Newfoundland. The name of the subsidiary is the International Power and Paper Company of Newfoundland, Ltd. He may be addressed in care of the Union National Bank, Lowell, Mass. Jack remains with us bachelors."

"One of my tent mates out here is Robert H. Clarke, II, who was in the power plant branch of the material division of the Air Corps at McCook Field, Dayton, before he came out here."

Alan W. Crowell is doing advertising machine work on small tools and gages for the Pratt and Whitney Company. He hears from Ed Fish, XV, once in a great while. He is in Middletown, N. Y., marketing celery as Professor Freeland says it should be marketed. Alan says, "Elliot Bidwell '26, and P. A. Welch, '25, are with the Aetna Casualty Company here in Hartford."

H. B. Hibbard reports the following: "1925-26 Flood Fellow in Commerce, University of California, M.A. 1926. I returned from the West via Yosemite, Grand Canyon, and Los Angeles, then by steamship to Panama City, through the Canal to Havana, and from New York to Boston. My present work necessitates traveling. I spent two months last summer in Miami, Fla., on a business report for the Coral Gables Corporation. I am at present in Philadelphia, presumably for two months or more setting up a budget and analyzing overhead expenses in a concern making steel window sash, shelving, and pipes and gutters. My address for the present is 413 West Franklin Avenue, Ridgewood, N. J."

Joseph B. Kaplan is office manager of the sales department and head of the statistical and research work in sales for Skelly Oil Company in Eldorado, Kansas. He has com-

1925 Continued

pleted a trip to the branch offices at Omaha and Minneapolis, and is now back at sunny Eldorado. — H. W. Kochs is chemical sales engineer for the Diversey Manufacturing Company at 53 West Jackson Boulevard, Chicago, Ill. He is Treasurer of the Technology Club of Chicago. — Grant F. Mayell is now mechanical engineer for the Certain-teed Products Corporation, at East St. Louis, Ill.

Warren L. Nye is doing technical control of stock preparation and an occasional bit of research work for the Scott Paper Company at Chester, Penna. He writes: "I was married to Miss Lucy L. Harris of Waterbury, Conn., on April 10, 1926. Marcia Hammond Nye and Mabel Harris Nye were born June 16, 1927. Has anyone else in the course had twins?"

Joseph E. Russell is marketing lubricating oils for the Standard Oil Company of New York in Manila, P. I. He has temporarily given up tennis to learn something about polo. He expects to be back in the good town of Boston sometime in 1929 on a vacation. — H. Chester Trask, is sales manager for Emerson and Mason, Inc., at 228 Main Street, Brockton, Mass.

This ends the Course XV Notes. As for myself, I have left the drafting board, and am now assistant to the power engineer of the same company, the West Virginia Pulp and Paper Company. My work includes a good deal of figuring, particularly on boiler efficiencies. I like the work very much, even if I have worn out my slide rule.

Cowan, Parkinson, Preston, and Wheeler, Inc., are still doing business at the same address and will be glad to see any of you whenever you are in New York. — FRANK W. PRESTON, *Secretary*, 77 Irving Place, New York, N. Y.

COURSE II

First, some one called up the office and said he was Browning, or to be more specific, Harrison Browning. I don't have to explain how pleased I was to hear a familiar voice and to have one-half of the Machines Product Company of Cleveland invite me to dinner. Perhaps Mr. Browning Senior won't think the percentage is right when I say Harrison is one-half of the company, but anyway he spends about two weeks of the month on the road getting orders for gears and similar machine parts, and the rest of the time he spends in the factory. Harrison says he gets some pretty varied experience. Sometimes there are good orders and then again he spends a day or so following up a telegraphic order from some fellow who turns out to be either a crook or a half-wit with a temporary craving for a carload of tractors. I suspect that married life must agree with him for he has grown — well, not fat, but at least there is plenty of breadth to accompany his height. I hope by the time you are reading this I shall have seen him again, for he promised to call the next time he was in Buffalo.

The next surprise was a letter from Ed Mason. He says: "Yours truly is indulging in sales engineering in Connecticut. The products I unload on unsuspecting victims are power plant equipment, boilers, engines, pumps, and so on. The work is interesting and highly instructive. While dancing in Springfield one night last week some one very rudely crashed into me and it was none

other than Chuck Knight. A short talk brought out the fact that Chuck has a good job now with the Plymouth Cordage Company. "Good" means that the job is all right after you know the ropes. Don Jones is with the Terry Turbine Company here in town and Gerald Milot was here for a couple of weeks introducing Klim to the learned medicos of Hartford. It is about time this boy Lauria really took unto himself a wife. Every Review leads us to expect some definite news along these lines, but when it appears he is still the same old elusive Toni. As for myself, the less said the better." That last sounds rather serious for Ed. He says if any of the gang are passing through Hartford (he doesn't seem to expect anyone to stay there) for them to call him at 3-0520.

Ed Collins is now in the old-faithful class for sure. I certainly haven't given him much encouragement by way of answering his letters, but still he writes. I am glad to hear from him every time and shall prove it before the night is out by answering him. He wonders if I remember the time when he, Haliburton and I started out for New York, in search of jobs and other things, one Thursday night in the spring of 1925. I remember every bump, skid, and raindrop. Perhaps if Hal hasn't forgotten it, he will feel moved to write and tell us all about his activities in the shade of the oil wells. Edson is still working for the U. S. Fidelity and Guaranty Company and stays in any given city about a week. He wrote the letter from Panama City, Fla., and was getting ready to shove off for Birmingham, Ala. The last he had heard from Stanley Freeman, Stanley was taking his road test for a marriage license, and also looking for a job. I wish Stanley would write and let me know if the "corn-fed" is the fortunate lady. Also Stanley has not favored me with any of his famed stories for a long time. Ed called at Jim Elliott's home in Superior, Wis. Jim works for the Link Belt Company in Chicago, and wasn't there. Jim's sister was home, though, and as Ed hasn't changed a bit, he had a good time just the same. Mail will be forwarded to him from 1301 Equitable Building, Des Moines, Iowa.

It seems queer to hear from Frank Preston by mail after calling on him and the rest of the gang as I oft did of yore. I think I have almost got him agitated into gathering Don Wheeler, Roger Parkinson, and perhaps Dick Tryon and journeying up here for a week-end excursion. Perhaps I can get hold of Jack Rountree and we shall all collect around some glasses of Rob Roy and hark back to the nights when we were wont to commune at Jake Wirth's. I wonder what has become of George Witham. Lin ought to be at the party too.

I have a change of address here from The Review office which announces the fact that Ray Wheelock is at, or with, Cia Mexicana de Explosivos S. A. Dinamita, Mexico. My Mexican is a little dusty, but I think that is a political party. Jim Elliott might send Ray a few hints from the Chicago elections. I have received a letter from Bob Huthsteiner telling me that Ray Wheelock went through there on his way to Dinamita to build a dynamite factory. Eddie Hagstrom of Gloucester also stopped at El Paso for a day or so with Bob. Bob is still traveling across the ample reaches of Texas selling power plant equipment or

when he is even luckier, whole lighting plants for some unsuspecting town. The only remaining item of dirt Bob could find to sweep up was that Jake Squire is now engaged to Miss Clara M. Robinson of Natick, Mass. By the time you are reading this it will be June, and perhaps Jake will have responded to the impulse of that happy month, and there will be a Mrs. Squire. I'm all for it. On April 19, Herbie Sontag became Mr. H. P. Sontag, Sr., to dintinguish him from an eight and a quarter pound Herbie, Jr.

I have a manuscript here which is as rare as though signed by Button Gwinnett. Anyway what I mean is I have a letter here from Harry Stiles! Harry tells me that Ray Wheelock is on his way to — no, Ray has actually got there — to Dinamita, Durango ad infinitum. As for Harry himself, he is enjoying Chicago very much. He comments on the fact that he hasn't even a bullet hole in his hat, but as I remember it, he never wore a hat, so he can still show his grandchildren a lock of golden hair sheared off the dome by a stray missile in the election of 1928. You remember that Harry took the refrigeration option under Velvet Joe? Remembering that, you will no doubt be interested to know that he is now design engineer for the Edison Electric Appliance Company, manufacturers of flat irons, electric stoves, air heaters and other products equally allied to the refrigeration industry. There are six other Institute men working for the same company, and Harry says they are principally from Course II, but doesn't mention whether they, too, took refrigeration. — ROGER WARD, *Secretary*, Curtiss Aeroplane and Motor Company, Inc., 74 Kail Street, Buffalo, N. Y.

COURSES III AND XII

About six weeks ago, W. T. Brown appeared at the Institute and informed me that he has left the Norton Company in Worcester, and is now associated with the Wallace-Barnes Company, makers of various measuring devices in Bristol, Conn. It was through him that first word reached me that E. L. Wildner has gone to Middletown, Ohio, and is now working for the American Rolling Mill Company.

Count Blansky has been very busy during the past few months here at school. While awaiting developments on his invention, he endeavored to teach the undergraduates a little bit about ore dressing. About the middle of April he went to New York for a few days and then to Washington where he started the machinery of the Patent Office moving on his new table. He then returned to Boston for a few weeks, only to go back to New York on May 12.

I. M. Symonds is making himself very much of a mystery. Two letters and a card during the past few months have failed utterly to produce any results. If he doesn't write very soon it will become necessary to report what the Secretary believes to be the cause of his prolonged silence.

With the completion of the year's work, the three members of Course III and XII who are still at Technology will be many miles away. Dr. H. T. Mann will be headed for the Southwest by the middle of June on a tour of the oil fields of that district. M. J. Buerger of the Geology Department in company with Professor Newhouse and A. C.

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Abbott, '28, are leaving about June 1 for Newfoundland. As for your Secretary, his date of departure is May 24, and his destination is first Toronto, and then Newfoundland, where he will be associated for a few months with the Swedish-American Exploration Company, making electrical prospecting surveys. — F. LEROY FOSTER, *Secretary*, Room 8-219, M. I. T. Cambridge, Mass.

COURSE V

I have several hats and all of these I take off, individually and collectively, to Harry Newman, who has taken a deep breath and gone into business for himself, with a gay snap of his fingers at Wall Street and all the dirty capitalists.

Harry's business card reads as follows: Crown Extract Company, manufacturers of high grade flavoring extracts and compounds, 207 North Street, Salem, Mass. Harry is President, Treasurer, Production Manager, plant force, and when I dropped in on him recently, was sweeping the floor. Right now, he is making vanilla, a brand new kind, which is "free from extractive impurities" (adv.). It is planned to go into fruit syrups later on. I'm certain that everyone joins me in wishing Harry the best of luck in his enterprise. In this day and age, it takes considerable gee you tee ess to branch out all by your lonely.

I have only one criticism to make. Harry gave me a bottle of Crown Brand vanilla, which I made haste to accept as I noted that the label showed a ten per cent content of an ingredient that brings joy to the heart and a song to these tired lips. Well, as Vanilla goes, it's pretty good, but if there is ten per cent alcohol in it, then Bevo is a highly intoxicating beverage and should be taken off the general market and sold only by prohibition inspectors.

This month's mail brought a letter from Pat Ramsey, a pleasant surprise. Let him tell it. "Here I am back at the Institute, taking Course I. Can you beat that? I decided that as a chemist I would make a darn rotten test tube washer, so I cut loose. To cite in rather more detail than is necessary, my doings since June 1925, I went up to the Technology Summer Surveying Camp at East Machias, Maine, that summer. Then I came back to the Institute in the fall and did a most noble thesis on the behaviour of electrotype metal. I finished that up in January, and the first of February I went to work for the Boston and Maine, as a chairman in the construction department. I went up to rodman later on, and hung there until the middle of April 1927. Then they had a reorganization in the Engineering Department and let out about thirty of their best engineers, including myself. The middle of May, after a month's loaf, I picked up a temporary appointment on the U. S. Coast and Geodetic Survey, and we ran a line of levels from Springfield to Boston and back. That job lasted till July 1. July 15 I sailed for the wilds of Brittany with my family and spent the summer there, and in Paris, getting back about September 10. It's a nice country, where good wine is twelve cents a quart, and drinkable water is twenty cents a quart. Can you feature that? The fore part of October I came back to Technology and registered as a Junior in Course I. I'm a glutton for punishment. When I get through I'll be able to claim membership in the Classes

of '25, '26, and '29, the year I hope to get my Course I degree." Pat has done some shacking around apparently, and is still all wound up. However, no matter, if he goes through every course the Institute offers, he'll always be considered as Course V, 1925.

I am proud and glad to give out the news that Sarkisian has recently made a big step forward. He is now, I believe, technical director for the Fiberloid Corporation, Indian Orchard, Mass. Your Secretary also made the welkin ring some time ago at the receipt of a raise to the tune of six hundred hand engraved portraits of our defunct presidents. That made me downhearted. To perorate, let me announce the marriage, some months ago, of Morris Weiner. No further details as yet. — GERALD MILOT, *Secretary*, 117 Pine Street, Attleboro, Mass.

COURSE X

Thomas Storey writes from St. Louis that since January 10 he has been principal draftsman in connection with the Mississippi River map survey. — Charlie Cooper is more or less permanently established in charge of the Winchester Station of the Practice School.

I know that you will be sad to hear of the death of Frederick N. Cheever, 23 Taylor Street, Saugus, on February 19, of diabetes. Cheever was with us for his freshman and part of his sophomore year. He will be remembered as a quiet but likable chap.

Last Christmas I received a card from Ed Harris bearing the laconical greeting, "Greetings from Mary and Ed. More news later." Naturally I immediately asked for details but to date can give no further information. We can do nothing but offer our congratulations and wonder who the lucky girl is, where they are, and how they are enjoying married life.

I have had one or two letters from Philip Glasson who is happily settled down with his bride at Berlin, N. H. — Dick Wick is at present engaged in research with the National Carbon Company at Niagara Falls, on carbon electrodes. He reports the perfection on his own hook of a new type of ultra-violet therapeutic lamp. He has an apartment with Jack Rountree. — Ke Chung Chang is now connected with the Tsing Hua College, Ping Ting, China. — John Campbell has changed his address to 5282 Second Boulevard, Detroit, Mich. — Bed Groenewold has evidently gone back to his native city, as I note a change of address to 527 Winthrop Street, Toledo, Ohio. — Hank Hoar has moved from Boston to Gary, Ind., where he is now employed by the United States Steel Company.

Any information as to reasons or wherefores or new occupations or interesting facts in connection with these changes of addresses either by the principals themselves or by friends, relatives or acquaintances will be gratefully received by your harassed Secretary. A couple of the fellows have kicked because they do not see more news but how in the name of everything that is good and holy can I print any news unless I engage the services of a fiction writer, or make up some stories on my own hook.

I have changed my office in Boston to 834 Commonwealth Avenue, care of The Emerson-Mason Corporation, where I would be tickled silly if some of you would drop in on

me. You will find four or five of your classmates here, so we can have quite a reunion. — SCOTT EMERSON, *Secretary*, 16 Lawson Road, Winchester, Mass.

'26 Johnny Jacob, may his tribe increase, is the only Course Secretary who finds it possible to make a report this month.

Trips to Europe, catastrophies and marriages have combined to upset the organization, and consequently der Konvergenzpunkt is bereft of fodder with the exception of a sheaf or two its prehensile proboscis has picked up at random.

Five hitherto unreported marriages demand primary attention. Back in November, C. H. Kingsbury was married to Miss Beatrice Rich of Siloam Springs, Ark. In Washington, D. C., on April 4, Edward Dingley and Miss Aline Dupuy were married. On April 21, Al Warner and Miss Margaret Marie Aller were married at Janesville, Wis. Guy Frisbie and Miss Katherine Menzie were married in Rochester, N. Y., on June 16. Two days later, at Woonsocket, R. I., I. R. MacDonald and Miss Sarah Elizabeth Morrow followed suit.

In the letter telling of his marriage, Kingsbury had the following to say in addition: "I have been working for a consulting engineer since leaving school. My headquarters have been in Joplin, Mo., but I have been traveling around the country that God forgot. If you must go to a foreign country, don't pick Salvador. In November of 1927 I married Miss Beatrice Rich of Siloam Springs, Ark. The two of us are happily married and just waiting for a chance to get back to the States.

"From our house here we can see the Volcano San Miguel that is always smoking (not Luckies, as they cost \$0.50 in gold a pack). However, never fear, as there is not a sign of an eruption. The worst feature of the thing is the earth tremors that it sends out about twice a month. As yet none of them have been serious. The ore here is supposed to contain gold and silver, but, worse luck, is not of high enough grade to make 'high grading' profitable." Letters will reach him at the Butters Divisadero Co., Divisadero, Departamento de Morozan, Salvador, C. A.

After their honeymoon, the Dingleys set up residence at 2415 East Street, N. W., Washington, D. C.

After June 23, Guy Frisbie will be enjoying the felicity of unbounded domesticity at the Sagamore Apartments, 621 West Gaylor Street, Seattle, Wash. He continues in the sales organization of the Hobart Manufacturing Company. His wife was in the Class of 1926 at Wellesley — information that is superfluous to all those who knew anything of Guy's career in Boston.

Mac's marriage, by his own admission, prevented him from turning in his usual stick or two of general intelligence. The letter telling of his marriage opened with these words: "Unleash the superlatives . . . !" Before der Konvergenzpunkt had finished the letter its pressure had increased two hundred per cent and the steam calliope, which is part and parcel of it, burst out with the Mendelssohn and Lohengrin wedding marches, orchestrated in counterpoint with "Glory Hallelujah!" The enthusiasm of these matrimonially-minded men is something wondrous to behold. After August 1, Mac will be

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doing research at the Bureau of Standards in Washington.

Two births have recently been reported. Bob Dean has a son, Robert C., Jr., and Bill Lowell a daughter, Virginia Anne. For the past summer Bob has been teaching architectural design at Georgia Tech and this summer expects to get away to Europe to take advantage of the traveling fellowship awarded him last year by the Institute. Bill Lowell continues as President of the Lowell Shoe Company, Newburyport.

Mooney Owen is in Europe; hence the absence of Course XV notes this time. — On June 1 Charlie Rich called at this office and chewed the rag awhile. After graduation Charlie worked with the Dennison Manufacturing Company until the illness of his father necessitated his returning to Swanton, Vt., there to take charge of his lime plant. He reports news of George Smith's engagement. — One of the 1927 news hounds reports that Frederick Columbus Balfe, Jr., is in Poughkeepsie working for the Central Hudson Gas and Electric Corporation.

It will interest the Class to know that \$2,085 have been contributed to the Dormitory Fund despite the fact that no solicitations has been made among the members. It should be pointed out, however, that one individual donated \$2,000 of this, with the request that it be anonymous. — J. R. KILLIAN, JR., *General Secretary*, Room 3-205, M. I. T., Cambridge, Mass.

COURSE II

Most of the Class is already aware of Al Warner's marriage. In case you should not have heard, the event took place on April 21 at the home of the bride, formerly Miss Margaret Marie Aller, in Jamesville, Wis. Mrs. Warner was graduated in 1925 from Beloit College, Al's first Alma Mater. She is a member of the Delta Gamma sorority.

I had a postal from G. M. McNeil, who wrote from Richmond, Va., to corroborate the report that he was working with the Associated Factory Mutual, and at the same time to correct the impression that his job enables him to live at home. On the contrary, he claims to be living in a suitcase, and in substantiation of this points out that his domicile in February and March was Buffalo, in early April Massachusetts and Connecticut, and in early May in that great southern metropolis. To get home for a few week-ends is the best he can do. We will certainly be expecting a lot of polish on this rolling stone.

In writing to friends at the Institute recently, Bob Brand summed up his career as follows: "By the way, a dash of personal history. I came to Rockford, Ill., last June; worked at Emerson-Brantingham Company three months; left in September and hired out to Barber-Colman Company, makers of hobbing machines, hobs, cutters, reamers, hob sharpeners, reamer sharpeners, hand knotters, warp tying machines, drawing-in machines, automatic spoolers, and high speed warpers (adv.) — all very fine machines, a very fine factory, and a very fine personnel. Early in October, married and 'settled down' in a comfortable apartment. I spent six months in the shop making the rounds, six weeks in the planning department, and recently was given a position in the sales department, taking care of advertising and

several other items. As little Eva is reported to have written on a post card from Heaven: 'I am well. I am happy. I am well and happy.' Selah!"

The litigation work that I was on in Newark came to an abrupt end last week when the judge became ill. Consequently, I am back in Chicago for the summer and at home to anyone from the Institute. — JOHN B. JACOB, *Secretary*, 1037 South Kenilworth Avenue, Oak Park, Ill.

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From a perusal of the Boston *Evening Transcript's* news of aeronautical Boston we find at least one mention every week

of Hank Kurt — periodical assurances that the Class still has a Course XVI Secretary. Lately he has been reported as the successful co-designer, co-builder, and co-tester of a plane, *Kitty Hawk*, named for the sand dune country in North Carolina, where the Wrights made their experimental flights. He is chief of the Dennison Airport at Atlantic, Mass., and, I understand, can there be prevailed upon to render service as an instructor or pilot (adv.) — Lloyd A. Bingham, who took his degree with our Class, has been given an instructor's appointment in the Electrical Engineering Department. — Frederick S. Erdman, II, has been appointed to the faculty of Robert College, Constantinople, as an assistant professor of civil engineering. The college is the oldest of the six American colleges in the Near East, having been founded in 1863. Fred, it will be remembered, came to Technology in our sophomore year, after being graduated from Princeton.

May 1 saw the Boston crowd gathered at the Engineers Club for the dinner referred to at the close of our section in the May Review. Although all of those who expressed pleasure are to me personally known to be capable of lying like gentlemen, both Ned Anderson and your Secretary are satisfied — that is to say, your Secretary will be satisfied when he collects a few dollars from those two or three who promised to come and didn't. After a good dinner we had a couple of reels of film showing the Conowingo Dam lent (the film, gentlemen, the film) to us by Messrs. Stone and Webster and a few more of that pathetic rural drama, "The (Af)Fair of the Iron Horse," secured for us from the Baltimore and Ohio Railroad by Professor John B. Babcock, 3d, '10. We originally planned to show some contributions from the New York Central Lines, but they sent us inflammable film which cannot be run from a portable projector in this Commonwealth. Thirty-three men attended.

Your attention is directed to Course X's announcement that one of its members, Bill Kaplan, is harboring a candidate for the Class Babyship. The Association of Class Secretaries, as far as your Secretary knows, has promulgated no rules to govern this honor, but he understands that the only requirement is that the parents married since Commencement. When that has been sworn to, your Secretary will certify the record, and proclaim Jeanne Kaplan the official Class Baby. In the meantime, Bill, the sincere felicitations of the Class. — Dave Knox reports attending the wedding in Dayton, Ohio, on April 8, of Frederick Johnson Hoooven and Miss Martha G. Kennedy. They are now at home

in Detroit, where Fritz is with the General Motors Research Laboratories. Congratulations, Fritz. Dave reports that Lee McCanne and Morg Collins also attended. Lee, who has been with the Stromberg-Carlson Company, is returning to the Institute next fall; Morg is at Harvard in the graduate School of Business Administration.

We have a new Course Secretary in the person of Sam Mawson. He will attempt to keep tabs on the VI-A gang who get their S.B.'s and S.M.'s at Commencement, June 4. — At the time of going to press nothing has been heard from either Lee Miller, I, or Charlie Bartlett, VI, and your Secretary is seriously considering calling out the police, firemen, and Boy Scouts to scour the woods for them. Lee sent in notes for the June issue of The Review, but we returned them with the request that he hold them for any additions he might want to make. Something interfered with his returning them.

A bulletin to the press from the Navy Department on June 17, said that Bud Gillies had a crash at San Diego and was seriously injured. He was attached to the aircraft squadron of the U. S. S. *Lexington*, but the plane that fooled him was one in which he was said to have been a principal owner. No supplementary information is available, but we all hope for the best. — Frank Crandell has been down in Chile with the nitrate interests. The following is from the Panama Canal Zone, "I have been building railroads in a bunch of hell-holes. Caught the fever twice and this last time set me down so hard that I'm coming home on my back, but if things keep going good, I shall be able to walk by the time I hit old Boston. I have not seen a woman (white) for a year. . ." Today Deke walked into the office, brown as an Indian and apparently cured of the shakes. — JOHN D. CRAWFORD, *General Secretary*, Room 3-205, M. I. T., Cambridge, Mass.

COURSE II

Three men have been heard from in the last three months, Hibbard, Glantzberg, and Inskeep, making our average one letter a month. There must be a lot of golf being played this spring. John Crawford informs me that this is the last issue until fall. That will give me plenty of time to read over the three letters I will theoretically receive this summer, under the assumption that our average continues at its present level.

Hal Hibbard has been bounding all over the Western Hemisphere investigating this and studying that and doing whatnot for the Goodyear Tire and Rubber Company. Out of the kindness of his heart he took compassion on my lot and scribbled three pages, on both sides, of Akron University Club stationery dated March 26, too late for the May issue, I hasten to state. From Bloomington, N. J., where he was last reported, he went to Newark, and then back to Akron again. On April 11 he embarked for Buenos Aires via Santos, Montevideo and Rio, to be gone anywhere from three months to a year. Part of his letter may be of interest: "For the past four months I have been in Newark, N. J., going through more training. I am technically in the Highway Transportation Department, and my work has been in conjunction with the Public Service bus fleet — the largest fleet in the world on pneumatic

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tires. At present it has 1,420 busses with an anticipated increase to 1,700 in the very near future. I have been accorded many privileges in Newark, giving me much authority in our establishment composed of thirty-five people. I have seen Tom and Mac (Knowles and McNeil) since coming back to Akron. As I'll be here for another ten days we shall probably have many a bull session before I leave."

Thanks, Hal, for the letter. Here's wishing you more luck and a pleasant stay in Buenos Aires. I intend to drop you a line soon. Incidentally I just received a card today from Hal postmarked Buenos Aires, and he seemed to be pretty well heated up over the *senoritas* and the highballs. Something tells me he is going to stay there longer than three months.

Glantzberg mildly reprimanded me for the blank space in the May issue. He writes from Kelly Field, Texas: "How come Course II was *bors de combat* in the last issue? I hope you haven't been sick. Things have been going along pretty nicely here. We spoiled our clear record last month and killed two cadets in our class. One of them spun in a bomber and burned. The other was in a six-ship formation diving in attack on a three-ship formation. He had his sights glued on the ship he was diving on, and was so concentrated on his camera gun that he waited until it was just too late to pull up.

"The first of June we all go down to Galveston for three weeks of gunnery. That's about the time it starts getting hot in earnest down here. During the summer there is just a screen door between this place and hell and they leave that open most of the time. It will be a nice relief to get down on the coast for the last three weeks."

Harry Inskeep expects to leave the engine lab in the lurch this June and join the staff of the Linde Air Products Company at Buffalo in the production department.

My work is leading me into the paper making industry—a far cry from building automobiles. At present I am applying my efforts to venturi equipment on paper drying machines as a means of circulating steam through the dryers and removing condensate from the dryers. Recently I spent ten days at Gatineau, Quebec, near Ottawa at the Canadian International Paper Company, and I anticipate several trips to various paper mills in the near future supervising installation of the equipment. I was in Cleveland the other day and arranged to have dinner with Tom Knowles, who came up from Akron. He is doing calculations in higher mathematics on zeppelins and is getting fat as well. His experience in magic is evidently standing him in good stead. Here's wishing all of you a very pleasant summer and vacation, and don't forget to write me sometime between now and fall. — DAVID R. KNOX, *Secretary*, 4506 Allendale Avenue, Detroit, Mich.

COURSE IV

By the time these notes are being perused by ye budding architects, engineers, laborers, salesmen, and farmers, one year will have glided swiftly onward since ye trod the path in du Pont Court arrayed in somber academic robes. Surely you will let your classmates know what you have done and are now engaged in doing by writing to your Secretary.

Maybe there is wonderment in your young minds as to why I included the noble occupa-

tion of farming in my opening remarks. Well, we have a farmer, or rather I should say, a former naval commander who has forsaken the noble calling of architect for that of "tiller of the soil." Yes, Brother Cahill has joined the ranks of those in the employ of the Department of Agriculture. I received a card from him at Washington, D. C., about a month ago. His address is 1336 Massachusetts Avenue, N. W.

The honor of representing the architects of the Class of '27 at the class banquet held at the Engineers Club, Boston, fell to the lot of Messrs. White, Brucker, and your humble Secretary. A very pleasant meeting and dinner were enjoyed and the interesting experiences of the past year were related. F. S. White is now in the Boston office of Jackson and Moreland, having spent some time in the western part of Massachusetts making power studies at one of the hydro-electric stations. Whitey likes the work too. — Fred Brucker is one of the structural engineers of one of the firms on School Street, Boston, and is gaining valuable and interesting experience.

No word has been received from our friends in Option One, nor have Brother Lyons in California or Patterson had the spare time to drop me a line. Bill Duffy is working with the J. W. Bishop Company as timekeeper and general man on the Nurses' Home at Worcester, Mass. Bill tells me that he may be transferred to Providence sometime in the near future to work on the new court house being built by the same company. Let's hope so, Bill, for I certainly would enjoy the company of you down here in little Rhody.

The general manager of the Portland Cement Association has not as yet decided to make me his assistant and as a result I am still the field engineer in Rhode Island. It's great work and interesting, too. Well, boys, there is no more to tell, so I will wish you all a pleasant summer with the hope that soon I may hear from each one of you. — THOMAS E. HEGARTY, *Secretary*, 195 Brown Street, Providence, R. I.

COURSE V

One year has passed since we were graduated. All, I believe, are in the best of health and spirits. At last I have heard from Jimmie Small. Not only heard from him, but also seen him. He attended the semi-annual meeting of the American Chemical Society held the middle of April in St. Louis. He was just the same Jimmie as ever,—overjoyed that besides having the company send him to St. Louis, he knew a girl from his home town attending Washington University. Both were in evidence on the dance floor after the A. C. S. banquet. I understand the group down at Baton Rouge is getting along finely and accomplishing something. Also, at the meeting were Dr. Gerke, Dr. Whitman, and Mr. Chappel. Probably the small attendance of Technology men at this meeting will be more than made up for by those attending the fall meeting at the Atlantic House in Swampscott.

The Review fills in the omissions of the happenings in and about Boston as told by Joe Brady. If he corresponds with the rest of the Course as he does with me, we all could drop into Boston anytime and know who's who and what has, is, and is about to happen. Joe is thinking of following the example of Peterson

and me by getting an automobile. Whether it is to be new or *nth* hand, I don't know. Ralph Peterson has had the pleasure of adapting a laboratory process he worked out to large scale production. Not only was the development and a trip into the South a pleasure, but he also advises, "Go south, young man (or men)." Dr. George Tucker is also with the du Pont Company. He is located in the dye works across the river from Wilmington.

One of our Course X friends, Bud Fisher, is still single. To all accounts he is having a very, very difficult time dating these southern women, but latest dispatches attest the fact that a grass widow is lavishing attentions and sympathy on him. — EDWARD T. DUNN, *Secretary*, 18 May Street, New Rochelle, N. Y.

COURSE VI-A

Now that the graduate year is finished and a job seems to be the next thing, it is always advisable to inquire as to one's hopes in that direction. Several of the men have already decided. As was expected, the General Electric is taking on the largest number: Acocck, Cutts, Jones, Leach, Rudge, Smith, Tucker, Turner, and Woods all seem to be headed there. Burckes, Cave, and Hammond evidently favor their old option and are going with Stone and Webster, Inc. Donald, Grew, Grierson, Mott, and Snediker have chosen the Bell System.

Notwithstanding the groups that are going with each of these companies, there is the usual collection of free lances. Halet expects to go back to Robert College in Constantinople. Muchnic is going to the Harvard School of Business Administration. Talbot is signed up with the Pennsylvania Railroad. Weed is staying with his option, the Boston Edison. Willcutt is going with Jackson and Moreland. It might also be said that the above announcements are subject to change without notice. The rest of the men are on the fence for various and sundry reasons. When the next issue of The Review comes out, they will have settled down at least long enough to be found.

Although there should be, in the normal course of events, no particular news, there is one item. Wheeler surprised the whole gang by getting married on May 25, and is even now receiving the best wishes and the plaudits of his classmates.

For those who don't know about it, Sam Mawson has been asked to keep the VI-A gang in the alumni columns. If you have any great event in your history, past, present, or future, or any event that isn't so great, let him know, and The Review will publish it to the world at large. — T. H. MAWSON, *Secretary*, 8512 Westchester Pike, Upper Darby, Penna.

CLASS X

Bring out the little shoes! Course X has the Class Baby. Bill Kaplan writes that he is the proud father of a daughter, Jeanne, born on March 23. He is picking out her playthings already. Bill is working for the Cities Service Company, and lives at 4 Walker Street, Weymouth. He is now controlman at the cracking stills after moving all about the plant. Art Guise, Ned Fletcher, Doten and Marshall are in the same plant. — A letter from Samuel Koslofsky, as we used to know him, informed me that he has changed his name to Kaswell. He worked with the

1927 Continued

New York Consolidated Gas Company for a time, but is now waiting for an appointment to the Patent Office.

Phil Darling has reported as follows on one of the famous return postals: "No news to speak of. I was just transferred to Perth Amboy. Back in the States!" P. S. "Got married about five or six weeks ago." Can you tie that for nonchalance? To return from Mexico and be married and call it no news. When you do get some news, Phil, telegraph collect. It should be worth while.

In a previous issue of The Review I noted the marriage of Miss Ethel Sherman to Les Woolfenden. Just a day or two after a letter arrived from Mrs. Woolfenden correcting me. The notice should have read Miss Ethel Lester. Les is expected back during July after his four or five months of travel in the Orient. — DONALD H. SPITZLI, *Secretary*, 49 Bridge Street, Springfield, Vt.

COURSE XIV

The past month has seen a marked increase in the Course XIV mail influx. Picture five letters being received within a period of two days after months of barren silence, and then you'll understand how come this Course Secretary has a hunch that the Cup had better be shined up soon for a long trip. Of course no one has as yet claimed victory in the Course XIV sweepstakes, but some of the letters certainly bear the earmarks of preparatory announcements.

As the most pleasant surprise of the month, comes a letter from Charlie Dinan: "I've been in Poughkeepsie since December working for the Central Hudson Gas and Electric Corporation as estimating engineer. There are a few other Technology men with the company, to wit: Nash, '24; Balfe, '26; and Sweet, '25; all Course VI men. I haven't seen any '27 men since I came out here. Yes, I'm still enjoying the peacefulness of being single, and I'm not planning any drastic change in the near future. However, only last week I had a very close call. I went down to Asbury Park to be best man at a boy friend's wedding, and the bridesmaid was an old pal of mine. She was willing to make it a double header, but after some skillful manoeuvring, I finally got away a free man."

Bill Erwin has returned from Antwerp, and writes that he is about to settle down, and reënter actively the race for the Cup. He points out that Johnnie Swift should be considered the favorite in the competition. John, however, writes that Bill will definitely win unless Hal Staebner has already done so, while Lyman Johnson admits Bill has a fair chance but refuses to count himself out of running. Swift, in addition to giving us the lowdown on the cup race, writes the following: "Regarding school work, I'm all clear now, and with only one final to pass, hope I can get my master's degree O. K. My thesis was to make insoluble non-metallic anodes. I made some—but most of them were soluble. After finishing school, I expect to go into electro-metallurgy, probably in New York State."

Mankowich is still in Waterbury, Conn., whence he writes: "I'm still with the Chromium Corporation of America, working in the research laboratory. After about six months work on throwing power and resistivities of

chromic acid plating solutions, I started work on a microscopic investigation of chromium deposits; that is, finding the temperature, current density and concentrating effects of the electrolyte on the structure of chromium. I am just finishing up this work. I am then to test the hardness of chromium plates by the Bierbaum apparatus (drawing a sapphire jewel under definite load and at certain speed across the surface of the plate and then measuring the width of the scratch with a microscope). Chromium plates of different temperatures, current densities and from the company's various solutions will be tested."

Lyman Johnson, who like Swift, will get his master's degree this June "interrupts the Muses who are scientifically inclined" to write the following: "Now have an appointment as a full-time assistant in Physics. I don't know yet how my efforts will be distributed, but I feel well satisfied. My thesis [which, as I recall, is on ionization potentials — N. C.] has stopped for awhile since I have done enough for my master's degree. It came out pretty well, and seems to have a promising outlook for further work this summer. Bill Erwin popped into the Institute the other day, and we ate lunch together, and discussed things in general. The following week we went to the '27 Class Dinner at the Engineers Club where we ate some more, saw some movies, and listened to Bill tell about his adventures on the high seas and in Antwerp. Bill tells me he is planning on giving me a close race for the Cup, and when he left me that night he was headed Beacon Hillwards to get a head start on me."

So the Course XIV Royal Cup Sweepstakes roll merrily on. Lots of luck to you all. Have a pleasant summer, and be sure to write before the November issue of The Review which closes in the middle of September. — NATHAN COHN, *Secretary*, 44 East Tulphocken Street, Germantown, Penna.

COURSE XV

This issue winds up the year for The Review and, in closing, I want to thank you chaps for the great way in which you have helped me put out my monthly quota of news. We've had lots of news this year, and I want just as much and more next year, so when you get my little card in the fall requesting some dope for our "colyum," don't procrastinate too long before you take the old pen in hand and scribble a few lines to Scotty.

Letters this month have been rather scarce. I did hear from Dike Arnold. He and Tom Grier were in Europe together last summer and when he came back to the States, Dike started out on the road selling shoes for his Dad. He's been traveling pretty much ever since, although he doesn't say whether he enjoys the life or not. At any rate he ought to have a pretty smooth line by this time, and I must say that he has learned one of the first lessons all salesmen must learn. He has learned to exercise a little self-control and not to palm off the same line of high-powered hokum on his friends and classmates that he slings to the poor unsuspecting public. I don't know how he managed it, but his letter was quite free from any discourse on the superlative qualities of Arnold Glove Grip Shoes. Dike has been covering Illinois, Wisconsin,

and has been out to the Coast. I hope business brings him back East some time soon.

Ray Hibbert sends the cheery word from Pittsburgh where he is located with the American Tar Products Company. He and the other "tar babies" (Bill Read and Warren Smith) have been kept pretty busy with the company's training course and having learned their lessons have been assigned to more or less permanent locations. Ray has been helping in the organization of a new department, and is now in that department doing all sorts of work in connection with the raw material supply for the Pittsburgh plant. By the way, I trust that Ray has been following this year's volume of *VooDoo* with his critical editorial eye. I hope Ray reads *The Tech* once in a while too. Of course, he would say that the only reason I read it is because I get a complimentary subscription. Nevertheless, it does help one to keep in touch with things. Never mind, Ray, I'm not narrow-minded—I've been reading *VooDoo* also, and it has a very broadening influence, even if it is not exactly uplifting.

A whopper of a letter came in from Glenn Jackson the other day. You remember he is with the Slater Company at Webster, Mass. However, he says he manages to get home to Pawtucket, R. I., for week-ends. You must do some traveling, old chap. Judging from the letter, Glenn is certainly coming along in great style. He has been working on the company's stockroom and already has helped to account for considerable savings. Just now he is busy re-routing and planning the flow of goods through the stockroom, and his boss has put him in charge of things. Great stuff! Things sound pretty prosperous, Glenn, when you talk about getting a Ford roadster and philandering with speed boats. I thought the textile industry in Massachusetts was in a bad way. He says that four of the boys at the plant have bought outboard motor hydroplane shells and go in for speeding on the nearby lake. The little craft make about twenty-eight miles an hour with an eight H.P. motor. Not so bad.

As for myself, I'm still in a sort of training course. When I started with the company, they put me through the various production departments and then transferred me to the laboratory. I remained in the lab. for about six months doing quite a little interesting research work and learning all sorts of things about the paint industry in general, and the Murphy Varnish Company in particular. A little over a month ago, they put me in the purchasing department for a few weeks and then shifted me to the stockroom and shipping room. At present I am working in the stockroom helping to straighten out several nasty tangles in the storage system, and doing all sorts of manual labor. Throwing cases of paint and varnish around all day is quite good for the old muscle, and I must say it is more invigorating than parking at a desk all day long.

Well, have a pleasant summer, gang. I hope you all get more vacation than I do. I get just eight days—and that's some difference after our long college vacations. However, it's all in the game, and there's no sense in kicking. — GEORGE C. HOUSTON, *Secretary*, 612 Prospect Street, Maplewood, N. J.

News from the Alumni Clubs

The Technology Club of New York

CRASH went the auctioneer's gavel, and little Nellie's favorite lying-in chair, the scene of a dozen feline confinements, passed out of the picture. And as the echo died away on the otherwise restful air of the east side the Technology club house at 17 Gramercy Park gave up the ghost.

For nineteen years the old brownstone house had stood its ground against the inexorable up-town march of affairs, and in that period had enjoyed a wide range of contacts, from that of an embezzling cashier to a long experience with a President who turned out to be head of the Young Republican Club. The extent of this range depends somewhat on the reader's political affiliations, however.

But the Gramercy Park days are gone forever, along with Nellie's confinement chair, and even Nellie herself, who so far has shown no susceptibility to the up-town trend. To quote Tennyson, which we believe is our privilege, the old order changeth, yielding place to the new, and if we know our omens, things are looking decidedly up for the Technology Club of New York. When the auctioneer was instructed to shoot the works down at the Gramercy caravanserie it was not that the club might fold up its tent like an Arab and silently steal into oblivion, but that it would have less obsolete baggage to hamper its progress to a new up-town club house.

The progress has begun, and the Technology Club now finds itself most comfortably housed in the Fraternity Clubs Building at 22 East 38th Street, on the corner of Madison Avenue. In fact so comfortably housed that the whole prospect brings a smile to the face of Sporty Spaulding, who was seen to wipe away a tear as he turned back for one last look at the old homestead before beginning the long trek to the up-town promised land.

The Fraternity Clubs Building is a sixteen story structure of recent construction, and designed for the very purpose of housing college organizations. The Technology Club is not "in on the ground floor," as the poets would put it, but is handsomely fixed on the second floor with two large lounge rooms hav-

ing frontage on both the street and the avenue. In the basement, which is only a split second away by elevator, is the dining room, formerly the grill (for those who know the place), but now set aside exclusively as the Technology Club's own, where its members may enjoy the excellent cuisine of the building, sign their checks, and avoid contact with the hoi polloi, riff-raff, or what have you in the way of names for non-Technology men.

The lounge rooms, which by the way have been furnished in no mean fashion, have been designated for various purposes on a basis of audibility. In the one we find the pool table, from which the choicest of vocal demonstrations may be expected to emanate during the crucial moments of Kelly and Cowboy, the radio set, whose noise-making potentialities are too well understood to need description, and the desk. The other lounge is dedicated to bridge, reading, speeches by President Coolidge, if any, and other activities of a silent or quasi-silent character.

On the same floor as the Technology Club are the squash courts, the pingpong table, and the putting green for golf practice. Elsewhere in the building are an oyster bar, a theatre ticket agency, which will provide you with pasteboards not procurable at Gray's, a stock ticker for the bloated bondholders (we use it for the baseball scores), a haberdashery, valet, and barber shop. And on the roof is a peach of a loggia running around the four sides of the building, partially solarium and partially open, from which it is possible to sweep optically the great city and its environs, much of which would not be the worse for a little sweeping.

As for bedrooms, the house has more in a minute than the old Gramercy establishment had in a year. When good old Joe Spinach, '06, comes to town on business or to raise a little hell, he can come right to the Technology Club and be sure of getting a room under the same roof. For commuters who want to go to a show in the evening, or for any other purpose to change from the business suit to more decorative and festive attire the "Closet Club" is the answer to a maiden's prayer. This handy institution is operated by Mr. Barker, the house valet, and for a small consideration you can get here a nice dressing

room, a locker, and even a shower if the case is serious enough to require it. Just give your suit to Mr. Barker in the morning, on arriving in town, and in the evening you won't have to give an inch to the fellows who can speak French to the waiter. And "she" may even invite you in.

We have not half begun to tell you about our new home, but we think it is advisable to stop here. We have had a number of years of experience in doing the secretary act for a certain section of our class, but this is our maiden effort for the Technology Club, and the club section of *The Review* may not be so hard up for material. Before closing, however, we must tell you that we recently had our annual election, and the presidency fell to R. H. Ranger, '11, well known as the inventor of radio transmission of pictures, and now a prime mover in the technical end of the Radio Corporation. Others elected were: L. D. Gardner, '98, W. C. Brackett, '95, and J. A. Burbank, '16, Vice-Presidents; R. B. Haynes, '13, Treasurer; R. J. Marlow, '17, Assistant Treasurer; and George S. Holderness, '22, Secretary. Governors till 1929 are Morgan Barney, '00, and William D. B. Motter, '05; to 1930, Oscar de L. Mayer, '19, and D. R. Linsley, '22; and to 1931, Robert S. Allyn, '98, John H. House, Jr., '98, and A. P. Mathesius, '06.

In closing we wish to invite Technology men to call and inspect our new quarters, and to add that we shall be glad to dispense application blanks for membership to those who are interested. Since the recent move there is a tangible and even negotiable evidence of a greatly increased interest in the Technology Club of New York, in fact so much so that we are seriously considering giving up our regular job in order to take care of the applications for membership as they should be taken care of. Drop in and get that blank, or write for it, while they last. It looks like a bull market. — GEORGE S. HOLDERNESS, '22, *Secretary*, The Fraternities Club, 22 East 38th Street, New York, N. Y.

Worcester County Alumni Association of M. I. T.

The annual dinner of the Worcester County Alumni Association was held at the Worcester



TECHNOLOGY CLUBS ASSOCIATED REUNION

Country Club on Thursday evening, May 17. During the afternoon about a dozen members took advantage of the pleasant day to play eighteen holes of golf. At 6:45 the annual banquet was held which was attended by approximately fifty-five members and guests.

The principal speaker and guest of the evening was Lt. Albert F. Hegenberger, '17, who addressed the members and gave a most interesting talk on aeronautics. Lt. Hegenberger spoke in detail about astronomical navigation and the important part that it plays in long distance flights. He also spoke in detail concerning the aeronautical astronomical instruments and the important work which is being carried on now to make possible quicker observations. He then told us the story of his flight from California to Hawaii in virtually the same manner he told it in *The Review* last November.

Mr. George Manter, a Technology freshman, whose scholarship record at the Clinton High School won him the honor of representing the Worcester Alumni as their scholarship recipient, spoke on the activities at the Institute and dealt with the various sports, especially crew.

Captain Ralph Earl, President of the Worcester Airport, Inc., and President of the Worcester Polytechnic Institute, was another guest who addressed the members. Michael J. O'Hara, mayor of Worcester, a guest at our dinner, welcomed Lt. Hegenberger officially to the city. Among the other guests were: J. P. Whittall and M. Whittall, who have been largely responsible for the interest aroused in flying in this city; Howard Booth, representing the press; and our well-known Orville B. Denison, '11, which made the dinner a complete success.

The following men were elected officers for the ensuing year: A. B. Sherman, '06, President; Myles Morgan, '23, Vice-President; Fred N. Dillon, Jr., '22, Secretary-Treasurer. Members elected to the Executive Committee were: Stanford H. Hartshorn, '11; George O. Draper, '87; Percy J. Colvin, '07; Donald F. Carpenter, '22; and Charles R. Myers, Jr., '22.

The meeting was brought to a successful close at 10:30. — FRED N. DILLON, JR., '22, Secretary, Room 733, State Mutual Building, Worcester, Mass.

Technology Club of Rhode Island

The annual meeting of the Club was held at the Warwick Country Club, May 15, and took the form of a combined golf tournament and banquet. The Country Club is situated on

the extreme end of Warwick Neck, and is almost surrounded by the waters of Narragansett Bay. It was a beautiful spring day, and quite a few members appeared for golf with bright shiny clubs and pressed plus fours. The Class of '16 seemed to be in the best form and the tournament developed into a battle between R. L. Fletcher and C. Salisbury Makepeace. Fletcher came through finally with a 45 for the best nine holes. The best part of any game of golf is the nineteenth hole where the boys gather in the locker room. This match proved no exception to the rule and we soon had a large crowd of golfers and new arrivals for dinner gathered in the lounge of the club locker room.

Later in the evening the officers were elected for the coming year, N. D. MacLeod, '14, taking the office of President, W. C. Wood, '17, Vice-President, and John C. Nash, '20, Secretary-Treasurer. Following the meeting, Assistant Dean Harold E. Lobdell, '17, talked on the aims and ambitions of *The Review*. Its growth from a rather small publication with modest circulation to its present form is well known to us all, but the story of how it came about was new and interesting.

Bursar Ford took a day off from the Institute and spent it with us in Providence to attend the meeting. He talked to us about student loans, not student to student, but the Institute to the student. It seems that the Institute has certain funds with which to help students in financial trouble during their attendance at the Institute. His story was most interesting and new to most of us, and the picture he drew of the Institute in the rôle of banker, as well as instructor, was a far cry from the popular conception of a few years back. — WALTER C. WOOD, '17, Secretary, Comstock Wood Company, 661 Westminster Street, Providence, R. I.

Technology Club of Hartford

The new President of the Technology Club of Hartford is Halsey R. Philbrick, '06, who was elected at the annual meeting of the City Club on May 19. Other officers chosen were: Arthur F. Peaslee, '14, Vice-President; George W. Baker, '92, Secretary and Treasurer; Herbert N. Bacon, '03, Assistant Secretary and Treasurer; and James W. Cartwright, '89, member of the board of governors.

The election of officers was followed by a series of addresses by guest speakers. The first speaker, and the main attraction of the evening was the guest of the Club, Professor

Charles H. Chatfield, '14, now a member of the Faculty of the Department of Aeronautical Engineering at the Institute. Hiram P. Maxim, '86, related some of his experiences on a recent trip to Florida, illustrating his talk with motion pictures. The part the Wasp airplane motor is playing in the government air mail service was described by George J. Mead, '16, of the Pratt and Whitney Aircraft Corporation.

The annual outing will be held jointly with the New Haven County Technology Club on Saturday, June 30, at the Boxwood, Old Lyme, Conn. Movies of former outings will be shown, and new ones made. The third baseball game for the second cup donated by the Hartford Club will be played. So far Hartford is 2 and New Haven 0. The third golf match for the second cup donated by the New Haven Club will be played. New Haven leads 2-0. The fifth tennis match will be played to settle the score of Hartford 2, New Haven 2. There will also be swimming on the Sound followed by one of Mr. Dow's wonderful dinners. Dennie will be there as usual as a guest of the Club. — GEORGE W. BAKER, '92, Secretary, Box 983, Hartford, Conn. HERBERT N. BACON, '03, Assistant Secretary, 35 North Main Street, Hartford, Conn.

Southwestern Association of M. I. T.

The Southwestern Association has had two gatherings in Kansas City since the last issue of *The Review*. The first was a dinner and bridge party held the night of April 4 at the Ambassador Hotel. The following Alumni, together with their wives or possibly prospective wives were present: C. E. Brown, '20; G. W. Hall, '23; E. Pomeroy, '23; J. W. O'Brien, '18; C. S. Timanus, '18; H. L. Robb, '21; F. H. Littrell, '23; J. J. Falkenberg, '19; R. L. Falkenberg, '19; J. W. Gustaveson, '18; H. E. Breitenbucher, '28; D. C. Bollard, '07; and W. L. McPherrin, '14. The party was engineered by Ellsworth Brown who should be highly complimented on arranging an excellent party and also upon winning one of the prizes.

The May meeting was a regular monthly luncheon held at the City Club on Wednesday, May 9. President Hall presided, and after the luncheon he asked Mr. Henrici to present the question of a scholarship for our district. Mr. Henrici told of the possibilities and it was discussed at some length. We hope to establish one. After the scholarship discussion, Mr. Ralph Street, who was the guest of Major Robb, told of a proposed hydroelectric development in the Ozarks of south-



HELD IN ATLANTIC CITY, MAY 25 AND 26

Atlantic

ern Missouri with which he is connected. Those attending this luncheon were: G. W. Hall, '23; Hermann C. Henrici, '06; Eltwed Pomeroy, '23; W. L. McPherrin, '14; J. H. Driggs, '21; H. C. Taintor, '21; Major H. L. Robb, '21; and Bransford W. Crenshaw, '24.

Hermann C. Henrici of our Association has recently been elected a member of the Alumni Council.—We expect to hold our June meeting at a time that will enable the present students at Technology who return to Kansas City when school is out to be with us. At that meeting Major Robb will tell us something of the work the Government is doing to make the Missouri River navigable.—BRANSFORD W. CRENSHAW, '24, *Secretary*, 402 Security Building, Kansas City, Mo.

Technology Club of Chicago

Thursday evening, April 19, the annual meeting and dinner of the Technology Club of Chicago was held in the Grill Room of the new Midland Club, with forty-two Technology Alumni present. The class representation ranged from 1925 back to 1875, the Class of '75 being represented by A. W. Watriss.

The following officers were elected for the ensuing year: C. Lauren Maltby, '22, President; Ross D. Sampson, '13, Vice-President; D. F. Yakeley, '25, Treasurer; James Elliott, '25, Secretary; and Charles J. Ward, '15, Assistant Secretary. Those elected for the Executive Committee were: Lonsdale Green, '87; Ridsdale Ellis, '09; C. L. Anson, '06; H. H. Bentley, '08; F. W. Pucky, '01; and H. Y. Currey, '02. Members elected to the Scholarship Committee were: L. W. Millar, '02; J. L. Shortall, '87; J. L. Hecht, '04; P. W. Moore, '01; and Frank D. Chase, '00.

After a brief business session the meeting was given over to delightful entertainment by Mr. Lewis, a clever monologue artist, and motion pictures of the wonderful scenery in the Black Hills of the Dakotas, including shots of President Coolidge while vacationing there last summer.

We were told by R. D. Flood '96, of the fatal automobile accident that had befallen H. W. Kern, '90, II, while on a pleasure trip to the West Indies. Mr. Kern had been an active and loyal supporter of the Club for a number of years and he will be greatly missed by a host of friends. Silent tribute was paid to Mr. Kern and a letter of sympathy was sent to Mrs. Kern.

On Wednesday evening, May 9, the Technology Club of Chicago gave a Denison Dinner-Smoker, and with Denny there to take the leading part in the entertainment, the meeting was a great success. The Club had as their guests four young men now in college as well as several men graduating from high school in June who expect to enter Technology this fall. The chef of the Electric Club had prepared an appetizing menu including fried chicken with all the trimmings which seemed to touch the right spot for all present. At the close of the repast each guest demonstrated his vocal ability with Dennie presiding at the piano, in singing some of the better known Technology songs.

President C. L. Maltby, acting as toast-master, then introduced Mr. Silverman of the Boston and Maine Railroad who happened to be attending a railroad convention

in Chicago at a very opportune time for us. Mr. Silverman said that there is a great need for technically trained men who have a thorough grounding in the various branches of railroad operations. To help meet this need a railroad option is being added to Course I at Technology which will require five years to complete. By alternately studying at Technology and working in the various departments of the Boston and Maine Railroad, Mr. Silverman felt the student would be in a good position to choose the particular branch of railroad work which appealed most strongly to him by the time he received his diploma from Technology.

Mr. Shortall next gave a brief sketch of the development of the Technology Club of Chicago. How thirty years ago they held one meeting a year which was attended by Alumni all over the Middle West and even extending as far as the Pacific Coast. Now each large city has its own alumni club with rapidly increasing membership and a good stock of Technology spirit. Mr. Shortall concluded his remarks by paying a splendid tribute to the great good which Dennie has accomplished for the Technology Alumni during the past five years. He voiced the regret of the members of the Technology Club of Chicago over Dennie's resignation, but wished him great success and happiness in his new work.

Dennie then took the floor and gave a very interesting talk beginning with the early days of Technology when the plant and equipment was worth about half a million dollars and tracing the development of the Institute up to the present time with the plant and equipment of twelve and a half million and an endowment of twenty-nine million dollars. Then Dennie gave an interesting insight into the various activities of Technology and told about the new courses which have recently been added to the curriculum of the Institute. He also stressed the great need for dormitories to provide the proper environment for the development of student life. He concluded his talk with two reels of motion pictures, one showing the present plant and physical equipment at Technology while the other reel gave a splendid insight into the student activities.—JAMES ELLIOTT, '25, *Secretary*, Link-Belt Company, 300 W. Pershing Road, Chicago, Ill. CHARLES J. WARD, '15, *Assistant Secretary*, 1125 First National Bank Building, Chicago, Ill.

The Technology Club of Albany

The second regular meeting of the Technology Club of Albany was held Wednesday evening, May 16, at Jack's Restaurant. President B. R. Rickards, '99, presided at the short business meeting following the dinner at which E. Sherman Chase, '06, of Boston was elected as the Council Representative to the Alumni Association from the Albany Club. The name of B. R. Rickards, '99, was chosen to be sent to the Alumni Council for them to consider in electing the three members of the Nominating Committee for a three-year term expiring in June, 1930. The Secretary urged donations for the Dormitory Building Fund and also spoke about payment of dues to the Alumni Association so each member would be a subscriber to The Review.

It was voted to hold our next meeting in September. The speaker of the evening was William Russell Davis, Esq., designer of the Peace Bridge at Buffalo, who gave a mighty interesting illustrated talk on the Albany Bridge situation.—E. RANDOLPH HAIGH, '22, *Secretary*, University Club, Albany, N. Y.

M. I. T. Association of Buffalo

Thomas R. Weymouth, '97, President of the Buffalo M. I. T. Alumni Association, has resigned, having moved to Tulsa, Okla. He is now President of the Oklahoma Natural Gas Corporation. Eugene L. Klocke, '19, Secretary-Treasurer, will act as President *pro tempore*—EUGENE L. KLOCKE, '19, *Secretary-Treasurer*, 1225 Liberty Bank Building, Buffalo, N. Y.

Technology Association of Minnesota

The annual meeting of the Technology Club of Minnesota was held Saturday evening, May 5, in honor of Orville B. Denison's visit to the Twin Cities. Dennie entertained us with movies on life at Technology, and the operator of the machine came in for a lot of kidding about the manipulation of the machine. Anyway, he did not run it backwards or break the film.

The following members were present: Daniel Belcher, '90; Jacob Stone, Jr., '99; Harold E. Young, '06; William Barker, '21; Frederic H. Bass, '01; John E. Nicholas, '26; W. Ramsey McIver, '22; David L. Sutherland, '14; George Doherty, '17; Lawrence Washington, '22; Herbert Hickey, '22; William H. Bovey, '94; and Eli J. Sax, '27.—RICHARD H. COOMBS, '19, *Secretary*, N. E. Mutual Life Insurance Company, 506 Plymouth Building, Minneapolis, Minn.

The Technology Club of Cincinnati

At the annual meeting of the Cincinnati Club, sudden illness deprived us of the presence of our then-President, Herman W. Lackman, '05. From this he never recovered, and it is with regret that we record his death on March 4. He was one of the Club's active good fellows, having held several offices and just completed the year as President. As he was prominent in local public affairs his membership was a distinct asset both to our local club and Technology.

We regret also to record the death on March 13 of George A. Cowing, '01, one of the organizers of the Technology Club of Cincinnati, and for years one of the most faithful attendants at the Tuesday luncheons.

Our Tuesday luncheons at the Hotel Havlin continue to be well attended. At one of these recently we hoped to have Professor Emerson of the Architectural Department with us, as he was in the city in connection with our new public library. However, our architect members plotted against us, and enticed him away to grace a meeting of the local architectural club.

One of our usual annual events is a summer outing, and plans are now under way.—WILLIAM V. SCHMIEDEKE, '12, *Secretary*, Penker Construction Company, 123 Valencia Street, Cincinnati, Ohio.



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Books

Continued from page 486

which resulted in the First American Division's bursting into territory of other organizations and almost capturing Sedan. This, according to Mr. Van Every, was due to "a change in army boundaries," but General Liggett ascribes it to "misunderstanding of an order," and adds: "This was the only occasion in the war when I lost my temper completely." He appears to be a very model of a modern Major General. But he had good reason for losing his temper: the erring First Division had already "captured" an American divisional commander and his staff under the impression that they were Germans, a piece of stupidity sufficient to irritate any commander.

As a lively picture — with a sober strategic background — of modern war from the vantage point of an officer who was successively division, corps, and army commander, General Liggett's book is not likely to be surpassed. To him also may be credited what is probably the best thumb-nail sketch of a modern battle yet penned: "There was an infernal din going on and 100,000 men were trying to kill each other within clear vision of a normal eye, and yet, as came to be the case often in this war, not a living soul was visible to us." For stark simplicity of diction, that passage is nearly homeric.

JOHN BAKELESS

From Primordial Globule

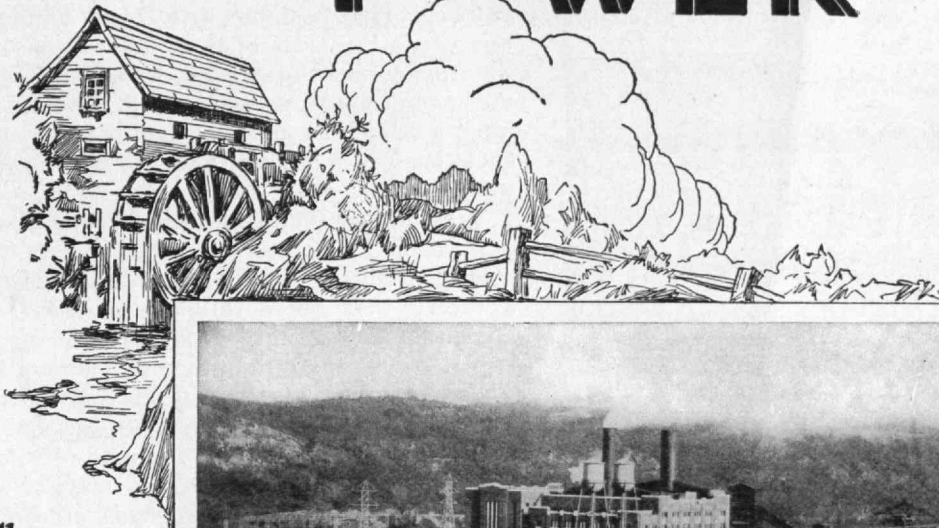
CONCERNING MAN'S ORIGIN, by Sir Arthur Keith. \$2.00. xi+188 pages. New York: G. P. Putnam's Sons.

DR. JOHN LIGHTFOOT, Vice-Chancellor of Cambridge University, is reported to have announced in 1654, after a careful study of the Mosaic account of creation, "that Heaven and earth, centre and circumference were made in the same instance of time, and clouds full of water, and man was created by the Trinity on the 26th of October, 4004 B.C. at 9 o'clock in the morning." That declaration was made with no more dogmatism than Sir Arthur Keith displayed in his presidential address before the British Association last summer at Leeds. Said he, "... the fundamentals of Darwin's outline of man's history remain unshaken. Nay, so strong has his position become that I am convinced that it never can be shaken." Assurance? Certainly, but granting that he did postulate the infallibility of science — and scientists — unnecessarily, few men have a better right to such an opinion than the author of this collection of essays, among which is the address in question.

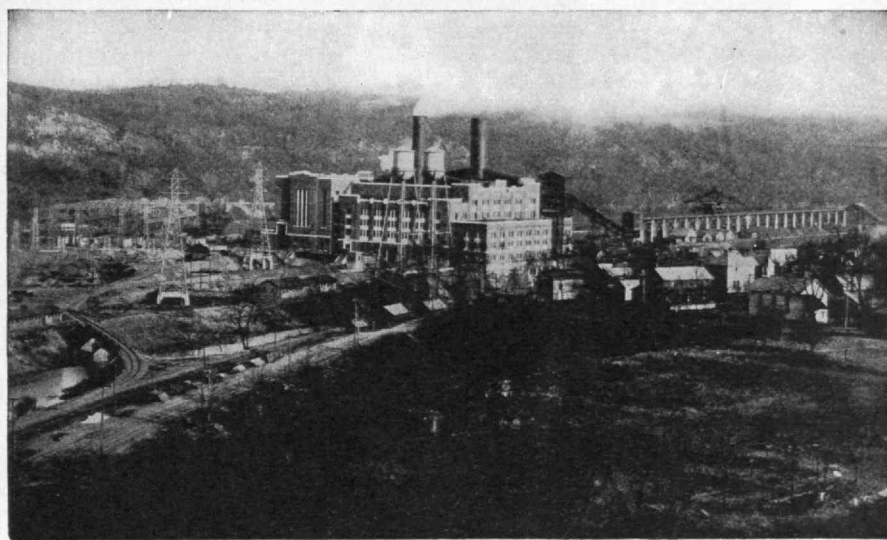
He justifies his assertion by reviewing briefly the evidence of fossil remains and discoveries in psychology and experimental embryology that have been made during the fifty-six years since "The Descent of Man," and he concludes "... that man has arisen, as Lamarck and Darwin suspected, from an anthropoid ape not higher in the zoological scale than a chimpanzee." Man did not, however, evolve in a single line from

(Continued on page 526)

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Continued from page 524

chimpanzee to gibbon to man. Instead, he says, the Human Stem branched off from the Great Anthropoid Stem (Orangs, Chimpanzees, and Gorillas) along toward the end of the Oligocene geological period, which he conservatively estimates to have been about a million years ago. Here he differs with Dr. H. Fairfield Osborn, this year's President of the American Association for the Advancement of Science, who, from his studies of the hand in primates, believes that the two stems separated much earlier and that man had even more lowly ancestors who were parents to the anthropoid apes as well.

Sir Arthur continues his discussion upon divers phases of the evolutionary process: the machinery for bringing about natural and sexual selection; the evidence against a theory that the anthropoid apes are degenerate humans; man's vestigial structures and his structural imperfections; the rate of man's evolution, and so on. These subjects he discusses lucidly and concretely with but little less effectiveness than his "address" which is an unusually terse bit of scientific writing. Of the other essays in the volume less may be said; they smack too much of padding in an otherwise concise argument.

J. D. C.

Politics

PRESIDENTIAL YEARS, by Meade Minnigerode. \$3.50. 396 pages. New York: G. P. Putnam's Sons.

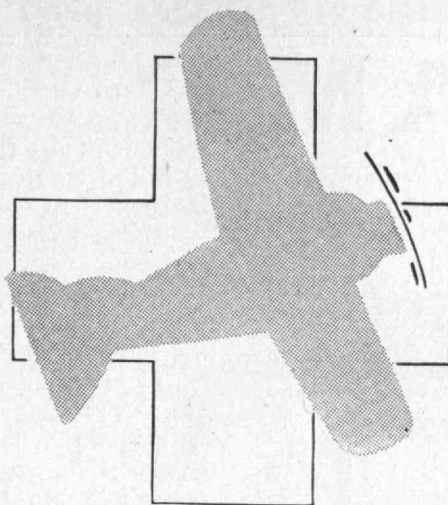
THE REPUBLICAN PARTY, by William Starr Myers. \$5.00. xii+487 pages. New York: The Century Company.

THE DEMOCRATIC PARTY, by Frank R. Kent. \$5.00. xi+568 pages. New York: The Century Company.

COMING events, especially the thirty-fifth presidential election and related occurrences, cast their shadows before in the book marts. The volumes listed above are but three examples of the heavy precipitation of odds and ends that has appeared to tempt the conscientious citizen into bolstering his pet political beliefs with a heavy documentation of fact. By no means need he limit himself to these three; there are dozens of others which he may take unto his bosom as Sibylline Books, to be consulted on and before November 4. To note a few: "Tammany Hall" by M. R. Werner (Doubleday, Doran and Company); "Drifting Sands of Party Politics," by Oscar W. Underwood (The Century Company); "Hamiltonian Principles" and "Jeffersonian Principles" (reprints), edited by James Truslow Adams (Little, Brown and Company); "The Also Rans," by Don C. Seitz (Thomas Y. Crowell Company). In addition there are at least two biographies of each of the major aspirants for the nominations.

It is unfortunate that some enterprising Shavian individual cannot catch the distillate of all this mash into some such volume as "The Intelligent Voter's Guide to Republicanism and Democracy." Ralph G. Hudson, '07, might well do it as a sequel to that admirable, useful and popular compendium, "A Handbook for Engineers" (John Wiley and Sons), or he might combine it with his projected "Handbook of Sports." On second thought, this latter idea grows in appropriateness and it is urged for consideration, if not in

(Continued on page 528)



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Continued from page 526

1928, then in 1932. With such a reference book, the people who will vote next November might do so with wisdom and historical perspective.

Until such a volume appears, the titles chosen to head this commentary will be of assistance for increasing the "collective wisdom of individual ignorances." Two important things may be derived from the reading of them: (1) An adequate picture of the origin and long-time trends of the two great American political sodalities, and (2) inspiration to make the forthcoming election more rambunctious and entertaining — more like those Mr. Minnigerode describes in which mudslinging was done with a fine frenzy, the poets took a hand, and the whole show was an edifying, grandly gawdy spectacle.

Certainly the three of them will furnish much food for prognostication as to whether the next president will be the seventeenth Republican or the fourteenth Democrat to get the job (excepting George Washington in the count).

J. R. K. Jr.

Books in Brief

SAFARI, A SAGA OF THE AFRICAN BLUE, by Martin Johnson. \$5.00. x+294 pages. New York: G. P. Putnam's Sons.

MT. KENYA, snow-capped "like an image of winter in the arms of summer," straddles the Equator, and not far from it in the hollow of an extinct crater in British East Africa lies Lake Paradise. On its shores the Johnsons made their home for almost four years. This volume recounts how Mr. Johnson in that vicinity took the movie, "Simba," of elephants, rhinos, giraffes, zebras, lions, and Mrs. Martin Johnson. Over sixty photographs are included.

CAPTAIN JACK, as told to Henry Outerbridge. \$2.00. 377 pages. New York: The Century Company.

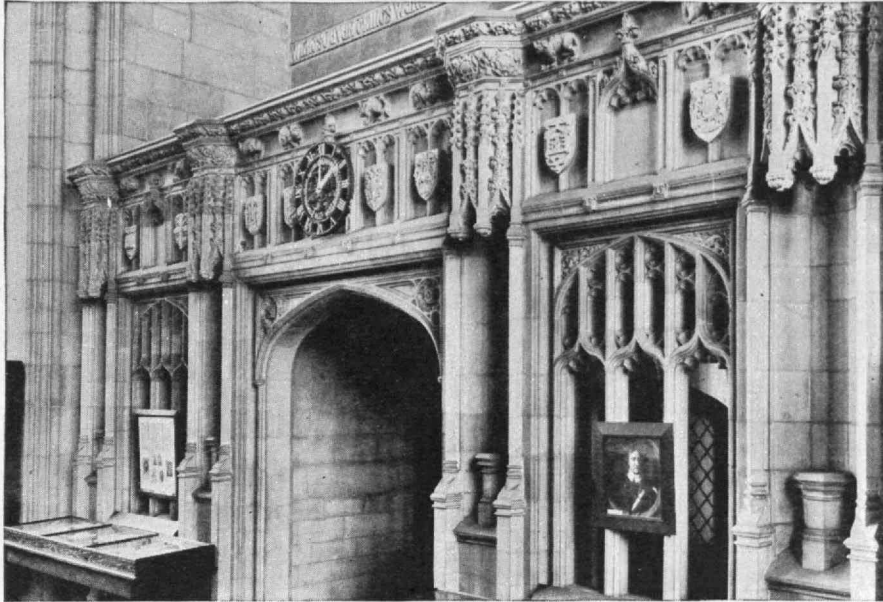
AN anonymous individual — according to the jacket blurb, "an official super-sleuth" — is cast in the title rôle. It seems he has had a busy life as a government agent and it has been his lot to start and finish private and semi-public wars, mostly south of the Rio Grande River. He is said now to be in Paris and the *raconteur* fever has struck him. Unfortunately he never had a chance to tell his stories to Richard Harding Davis. Or, perhaps he did, and Mr. Davis thought them over instead of writing them out.

MACHINE SHOP PRACTICE, by Harry A. Jones. 72 pages. New York: Thomas Nelson and Sons, Ltd.

MACHINE WORK, by Theron J. Palmatier. \$2.25. 212 pages. Stanford University: Stanford University Press.

THESE are text-books of general machine shop practice, giving a large variety of problems for the standard machine tools. There is a good assortment of problems and processes, briefly and clearly described, accompanied by working sketches, and where it is necessary illustrations of tools and tool positions are shown which are helpful to the student.

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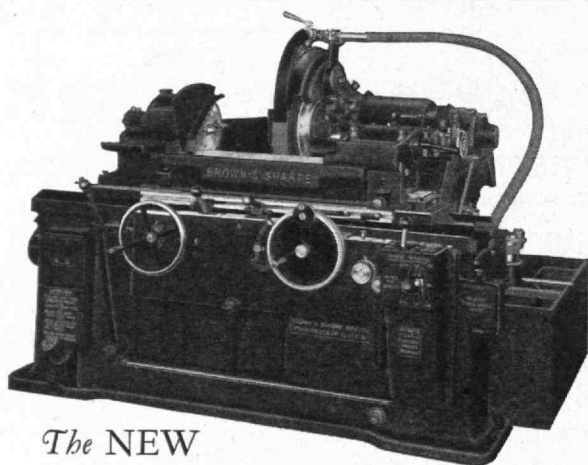
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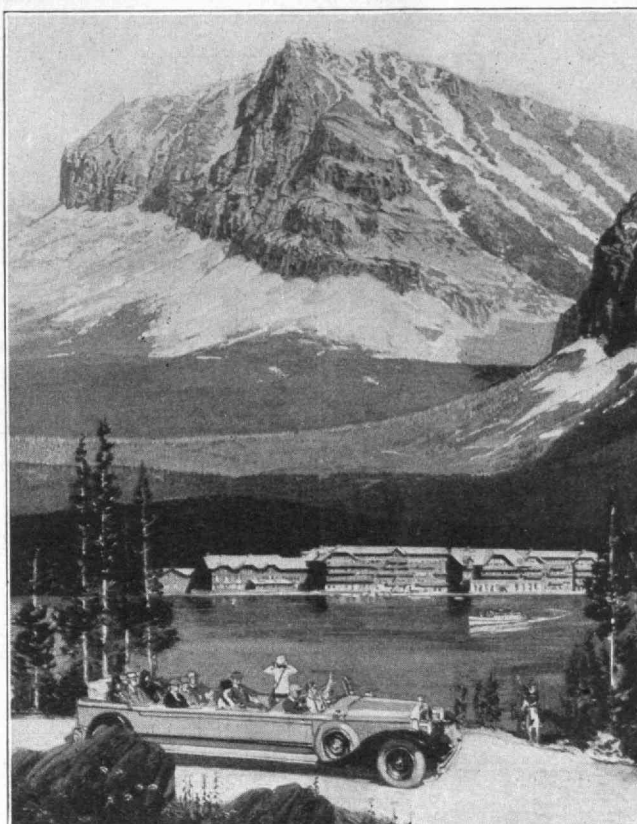
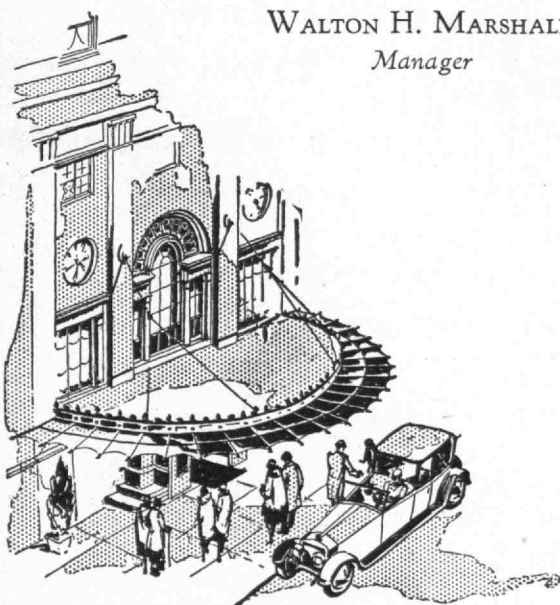
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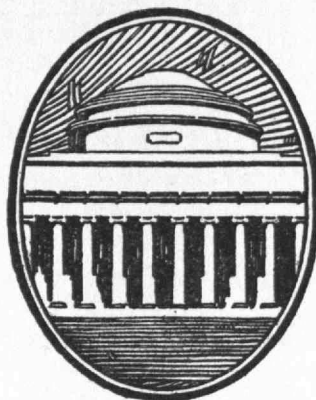
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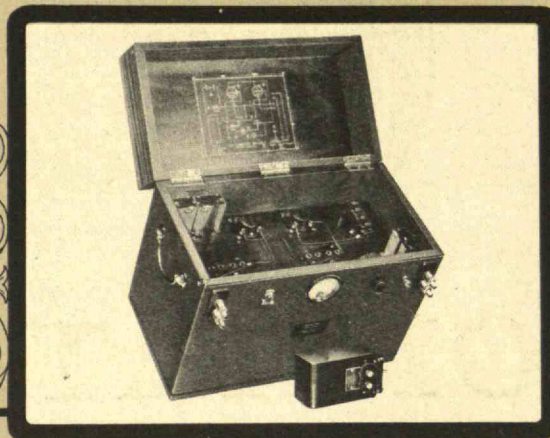
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